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Passionate issues behind the Passion Play

In 1633, when the plague raged in Upper Bavaria, the villagers of Oberammergau vowed that they would re-enact the Passion of Christ every 10 years if they were spared. They are about to honour their pledge for the 37th time.

The history of the Oberammergau Passion Plays has always been a passion in its own right — especially in the past few years.

The dispute over the true depiction of the Passion and the style of the play among the 5,000 villagers has been so fierce that some of the more sensitive and militant among them have been deeply hurt.

But the feud over the crucial question whether the original text of Father Rosner should be used or the text of the local village priest, Alois Daisenberger, on which the play has been based for the past 100 years (and which was pilloried as anti-Semitic) is now over.

Most Oberammergauers have opted for the Daisenberger version, though they compromised by eliminating the questionable passages.

This being a Passion Play year, the rift between the two feuding parties has been papered over for the time being. Even Daisenberger opponents are now eagerly rehearsing — the vow must be fulfilled and business must go on.

Strangers coming to Oberammergau will never quite understand how fiercely the two factions fought with each other because *they find it hard to believe* that there could be so *much* passion behind the Passion Play.

Now, only a few weeks before the premiere, peace reigns supreme in Oberammergau.

The organisers of the festival, actors (all lay), hoteliers, the town council and the tourist office are preparing to meet the onslaught of the half million visitors expected to come to Oberammergau between mid-May and the end of September.

But a new dispute over the old Rosner versus Daisenberger issue is already programmed for 1984, the 350th anniversary of the plays. (The first took place in 1634).

Some Oberammergauers are worried about the future of the plays. After months of rehearsals, they played the Rosner version in 1978, which earned them good critiques. As a result they cannot understand why the Daisenberger text was resurrected.

According to them the play, which will be performed 100 times this year, underwent only a bit of verbal cosmetics. The contents and spiritual attitude remained unchanged. All that happened was that a few passages were eliminated, making the text even more shallow.

The opponents also criticise the excessive number of performances. i.e. five a week (on Sunday, Monday, Wednesday, Friday and Saturday), which is an enormous strain on the 1,000 players, singers and orchestra members of whom more than 800 are working men. Incidentally, their financial losses are made good from festival coffers.

The Passion Play Committee now thinks that it has beaten the problem of stress — at least for the 18 main characters.

Its solution, which is also aimed at preventing a star cult, was to have two players for the main roles and no understudy. The players will perform on a strict rota system.

This innovation will make for some interesting comparisons. In one performance, Christ is played by a 48-year-old tradesman and, in the other, by a student of dentistry aged 20.

Rivalries are unavoidable: who is the better Jesus: Rudolf Zwink, the young academic, or Gregor Brietsamter, the tradesman, who played the role 10 years ago?

Hans Schwaighofer, the main protagonist of the Rosner version and formerly the director of the plays, tersely calls the new system of two players for each role "nonsense."

The organisers have also come under fire from a totally unexpected side: the granddaughter of the legendary Jesus Anton Lang was no longer prepared to put up with the fact that men have all the say in matters of the play and that women are traditionally excluded from the committee which assigns the roles.

Frau Lang took the matter to the Bavarian Constitutional Court in Munich which, though indirectly ruling in her favour, ultimately said that her motion was not in its jurisdiction.

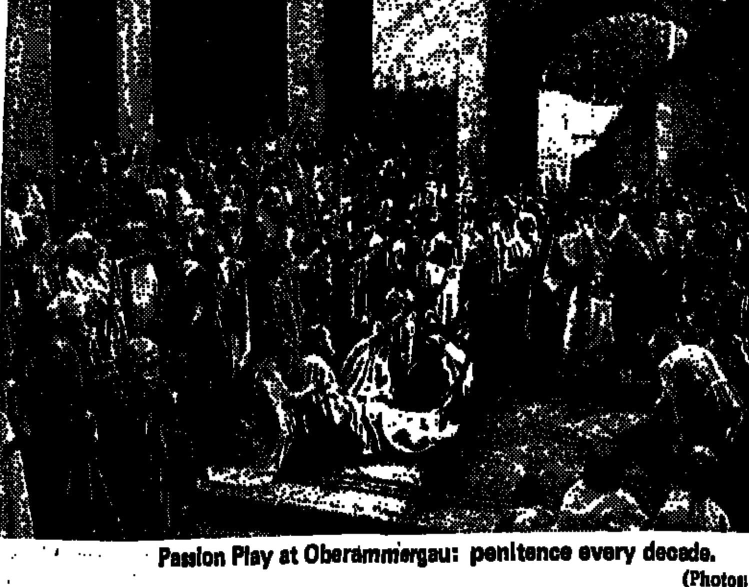
True, the Passion Plays are a matter concerning the whole of the community and the original vow has to be honoured by all, men and women alike. But, the Munich court ruled, this is not a political or constitutional right but an agreement falling under civil jurisdiction.

In fact, there are some ancient regulations governing the Oberammergau plays.

Married women may not act in them nor may single women over 35. But what about a "virgin with child" — like Monika Lang?

The question is clearly embarrassing to the Oberammergauers because tradition provides no answer — perhaps because the issue never arose before.

But the citizens, too, find it unthinkable that a Virgin Mary or Magdalene should be chosen only because of her beauty or her special acting talents, with total disregard for her morals. Only three compromises have been made: Irmi Dengg, 41 the magnificent Mary of 1970, may play the role again although she is over 35. An exception has also been made over the orchestra which now has a few people who were not born in Oberammergau. This was done because there is not enough local talent. And instead of the three sheep needed for one of the scenes, this year there will be six. The farmer who provided the sheep the last time was not asked to do so again and protest against the ruling.



Passion Play at Oberammergau: penitence every decade. (Photos: Ewald)

Now he may drive his three sheep on the stage in addition to the other three.

But notwithstanding feuds, defamation and insults, the show must go on. In fact, this rather than the ancient vow is the driving force today.

After all, the festival season fills the community coffers even more than the usual flood of tourists in between. The citizens of the formerly poor village of small farmers and wood carvers in the heart of the Bavarian Alps have become prosperous thanks to the tide of tourists.

Laments the mayor: "The high standard of living is now causing trouble in trying to provide the necessary tourist accommodation during the festivals. No-one is prepared anymore to move to the barn and rent his bed."

The Oberammergauers expect to earn more than DM100m this year. Tickets will be sold at between DM40 and DM60, making for DM26m if 500,000 attend. The plays are expected to cost about DM20m. New costumes had to be bought, the sets re-designed and new technical equipment was also needed.

Added to this is the pay for the actors, musicians and technical staff plus electricity, transport for the guests, maintenance, cleaning, etc. But DM6m will flow into the municipality coffers and will be used for the village school, the recreation grounds and the construction of spa facilities.

To secure business for local hotels and restaurants, tickets will only be sold in conjunction with bed and board reservations (except for the 18 Saturdays).

The package deal for the three week-day performances begins with dinn the day before the performance ends with breakfast the following Prices range between DM191 DM375.

For the Sunday performance the ckage includes only one overnight with dinner, breakfast and lunch costs DM152 to DM258. This can be bought ahead of time.

But visitors — especially those f afar — are unlikely to be satisfied what can only be termed "pi rations". They will spend money and above the package deal, buying wood carvings, mostly of saints, w are already lined up in the shop dows.

The few professional photographe Oberammergau, who have already t their pictures at dress rehearsals, only sell them with the approval of village council and the festival commi tee.

The press must file special appli tions to take photographs and the ous committees involved are flexing muscles: those who ask to take many pictures are given a clear "no".

Oberammergauers fear that too photographs published in newsp and magazines could have an advers fect on the sale of their own.

Some might say that this is a impious tug-of-war over a pious But that would be an exaggeration.

Of course there is a tug-of-war in O erammergau and certainly the vil will have a financial bonanza. But the villagers this is not the main t The Passion Plays are a way of life Oberammergau and an expression of people's deep religious faith.

The village has no amateur the and no folkloristic dance groups. But best of directors could not make Passion Plays more impressive. Per he could make them more perfect he would turn them into a meanin spectacle.

One could almost say it hardly ters who does the directing and w text is used or who plays whom.

Oberammergauers start acting in plays as small children. Frequently, th are three generations on the stage sim taneously.

So the whole thing becomes a way life and it is not surprising that you sters are as enthusiastic as the 85-y old who will now be in the festival the seventh time — over a span of years.

He has seen so much feuding th nothing can shake him anymore.

"We play first and foremost for o selves and not for the others," say t Oberammergauers — and mean it.

Volker Bühle

(Plus, 19 March 19



The Via Dolorosa scene of the Passion Play.

The German Tribune

Hamburg, 13 April 1980
Nineteenth Year - No. 936 - By air

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Europe gives Carter specific backing on hostages

Europe has shown surprising solidarity with President Carter over the Tehran hostages, much more than over Afghanistan, for instance.

The heads of government of the nine Common Market countries have appealed to the Iranian leaders to arrange for the release of the hostages.

There are few indications that this unaccustomed unanimity is in any way attributable to a reappraisal of Mr Carter's performance as a statesman.

The Nine's gesture of solidarity was due solely to a sober estimate of self-interest, and that is what makes it all so alarming.

It is clearly no coincidence that the European move coincided with confusion over been messages that may, or may not, have relayed to the Iranian leaders.

It seems reasonable to assume that the EEC leaders felt it was in the interest of their own countries to lend demonstrative political support to Mr Carter's dramatic bid to secure the release of the hostages.

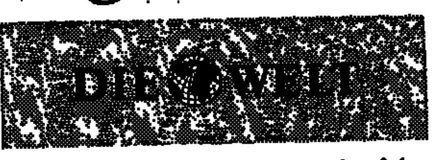
The signs are that the US Government is making a final attempt to show goodwill towards Iran.

In European capitals people are bound to be wondering what will happen if the hostage saga carries on regardless.

It will be recalled that Chancellor Schmidt has on more than one occasion praised President Carter for the months of patience he has shown over the affair.

Mr Carter has unquestionably gone to the point of self-denial in exercising restraint and setting aside great-power prestige considerations in the hope that common sense would one day prevail in Tehran.

He could feel his sensible discipline was a contribution towards saving the lives of American citizens who had been



the victims of a heinous breach of international law.

But hopes have been dashed and the day was bound to come when America began to wonder whether its President's patience was not just uncertainty about what to do.

Mr Carter is being subjected to ever stronger pressure. He appreciates that voters whose support he is canvassing to re-elect him later this year are beginning to doubt his political competence.

He is under irresistible compulsion to act. But what can he do?

Diplomatic moves to free the hostages are clearly ineffective because Iran's Islamic revolution has yet to lead to the establishment of government institutions with sufficient power to act.

All power still lies in the hands of an angry old man who is leading his country back into the Middle Ages.

Under the Sha, Persia set its sights at modernity, and the radiant centre of power that embodies modern civilisation is America. That is why Khomeini hates America.

His hatred is aimed at the hostages and at the sick Shah; they are both victims and symbols for use in revolutionary mobilisation of the masses.

The hostages' fate continues to depend on stabilisation of power in Iran, and that is a prospect as uncertain now as it has ever been since the outbreak of revolution.

This state of affairs makes the further course of the hostage affair well-nigh incalculable.

What, then, can President Carter do? If he had had some effective means of freeing the hostages he would surely have long since done so.

The less he is able to act on his own behalf, the more his European allies will be called on to step up the political and economic pressure on Iran that America alone cannot sufficiently exert.

Since the lives of US citizens are at stake, specific solidarity is demanded much more urgently of Europe than has so far been the case over Afghanistan.

But the greater the extent to which pressure on Iran assumes political, economic and military form, the sooner the latent twofold crisis, Afghanistan *and* Iran, may merge into a single fully-fledged international crisis.

Then only, but then for sure, the brink of direct confrontation between the United States and the Soviet Union would be reached.

Suddenly everyone would be obliged to acknowledge that in Afghanistan the Soviet Union had assumed control over a strategic deployment area facing the Middle East, where Europe buys its oil.

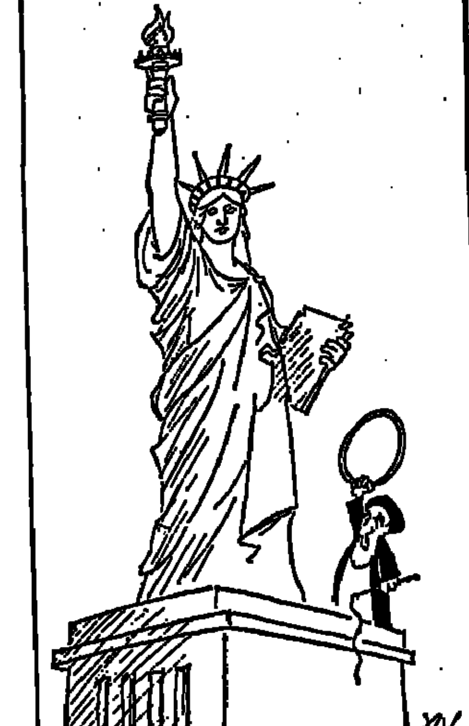
As yet this crisis scenario is mere hypothesis, but it may explain why this time President Giscard d'Estaing of France chose to join forces with the other EEC leaders.

When danger really lies ahead France can no longer afford to play at insisting on a special role of its own.

This crisis scenario may also explain why Otto Wolff von Amerongen, president of the Standing Conference of West German chambers of Commerce and Industry, is in favour of economic sanctions against Iran.

Herr Wolff has consistently been opposed to economic sanctions against the Soviet Union over Afghanistan.

Yet if Bonn were to call for sanctions against Iran, he says, the move would in his view meet with approval in commercial and industrial circles.



"Jump!"

(Cartoon: Mitropoulos / Die Presse, Vienna)

Maybe he hopes America and Europe will, by joining forces, be able to force Iran to free the hostages before the Soviet Union arrives on the scene directly and not merely as a latent threat.

It may be left to the casuistry of European crisis managers to work on the assumption that the repercussions of rumbles in Afghanistan and the Middle East on Europe can be distinguished and kept separate.

There is certainly only one United States and only one US President to deal with, regardless whether it is a matter of the Afghan or the Iranian crisis.

What is more, there is only one Soviet Union in the reckoning.

American public opinion is not prepared to allow Mr Carter much more time to patiently wait and see. Europe may soon be called on to seriously demonstrate its solidarity.

Wilfried Hertz-Eichenrode

(Die Welt, 1 April 1980)

IN THIS ISSUE

Bucharest breaks Comecon ranks over trade

The impending conclusion of an agreement between the EEC and Comecon could so easily sound a clarion call that the 1975 Helsinki accords still held good despite international tension.

A forthcoming treaty might well be taken as signifying that normalisation of ties between East and Western Europe was still on the agenda.

But that is not how Moscow appears to view the situation. March negotiations between officials from the two sides in Geneva made no headway at all.

Comecon continues to insist on including in the agreement provisions that as EEC governments see it are more properly the concern of future trade agreements between Brussels and individual Comecon member-countries.

So Wilhelm Haferkamp, EEC commissioner for external affairs, has told Comecon secretary-general Nikolai Fadeyev that fresh negotiations at the political level are pointless until progress has been made at expert talks.

Rumania has undermined the entire dispute and concluded two separate agreements with the European Community that assure it of substantial improvements in access to West European markets for its exports.

Bucharest is the first Comecon capital to take advantage of the EEC's 1974 offer of treaty terms for all East bloc countries that chose to negotiate them.

Certain political circles in Bonn are now urging the EEC to show what they term greater flexibility towards Comecon in order to visibly pursue detente policies.

But neither Britain nor France see any occasion for relaxing the Common Market's position consistently upheld in four years of EEC Commission negotiations with Comecon.

Afghanistan has begun to influence opinions too, although the fact is not officially admitted.

Bonn can certainly not urge haste even if it wanted to do so, since West Berlin's status as part of the EEC is one of the controversial issues on which Comecon has yet to yield.

(Frankfurter Rundschau, 1 April 1980)

FOREIGN AFFAIRS

Apel sounds out views from the nations of the Pacific

Bonn Defence Minister Hans Apel has just flown to the furthest corners of the globe to visit Japan, Australia and New Zealand.

The first and most obvious question that comes to mind is why he should go to the trouble. West Germany is neither a world power, nor does it enjoy a special relationship with anyone in that part of the world.

The answer is simple enough: to be seen, to hear what his hosts have to say and to outline his own assessment of affairs relative to his portfolio.

He was also keen to show a willingness to cooperate to the extent to which a medium-sized power is able to do so. This all made his visit a little more than a mere exchange of pleasantries.

The make-up of his delegation likewise indicated he had more in mind. He had with him Herr Eberhard, the senior Ministry official in charge of armaments, and General Tandecki, head of the military policy department.

Difficult though it may be for Herr Apel as a lifelong civilian to think in terms of the specifically military from time to time, he regards it as a matter of course that as Defence Minister his responsibilities extend beyond the Bundeswher to include the country's external security as a whole.

It depends, for instance, on safe supplies of raw materials, on freedom of shipping and a functioning system of world trade just as much as it does on purely military considerations.

The tour also brought home to Herr Apel more forcefully than hitherto that Bonn has worldwide security interest far transcending the narrow bounds of Nato, even though it may be limited in its own military commitments.

He had intended to visit Indonesia too, but last-minute difficulties arose that forced a change of plan. So it was all the more gratifying that he was clearly welcomed in Tokyo, Wellington and Canberra.

On key issues, moreover, he and his hosts found their views tallied. This was particularly the case in Tokyo, where the repercussions of the Soviet invasion of Afghanistan are viewed in much the same way as in Bonn.

He and his Japanese hosts were equally sceptical about the West's ability to induce the Russians to withdraw from Afghanistan.

They also agreed that Japan must step up its defence expenditure, which is a mere one per cent of Tokyo's gross national product.

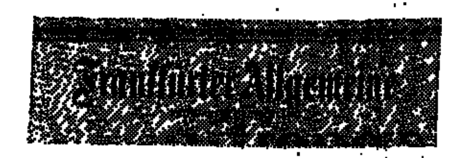
Herr Apel favoured plain speaking. He said Bonn was keen to keep the peace and determined to maintain defence preparedness. He likewise called Soviet imperialism by its name.

This contributed towards the success of his visit, as did his decision not to pressurise Tokyo to step up defence spending as fast as possible (which Washington would have preferred).

Instead he backed the Japanese desire to proceed gradually. It was a matter of boosting defence potential, not of merely stepping up defence expenditure.

This first calls for planning and strategy, then — and then only — for higher spending.

Herr Apel was doubtless only too happy to oblige Japan on this point,



since America has expectations of him similar to those it has of Mr Hosoda, the Japanese Defence Minister.

A further intention they shared was that of maintaining as cordial ties as possible with the Soviet Union. Bonn is ready to continue what, since the occupation of Afghanistan, has been apostrophised as a "realistic" policy of detente.

The economic prerequisites of security came further to the fore during his visits to Australia and New Zealand.

This was partly because both are limited in defence potential with a population of 3m in New Zealand's case and 14m in Australia's.

Besides, they are both out on a limb geographically and an extremely long way away from the centres of power and, for that matter, the world's trouble spots.

To the extent they are able, both countries have adopted a tough stand in reply to the Soviet aggression, backing a boycott of the Moscow Olympics and the US embargo on grain deliveries to the Soviet Union.

In addition, New Zealand has halved the Soviet Union's fishing quota in its 200-mile economic zone. Last year Moscow was allotted a 65,000-tonne quota; this year it is to be only 35,000 tonnes.

New Zealand, he noted in Wellington, has for years played an important part (largely unnoticed by the world at large) in ensuring stability in the South Pacific.

It is surrounded by a pattern of South Sea islands, many of them minuscule states with few people and less money but very interesting strategic locations for a world power on the lookout for bases in the area.

New Zealand, he said, deserved much of the credit for having ensured that Soviet bids to gain a foothold in the area had so far been in vain.

Whenever the Soviet Union had embarked on activities in the region the New Zealand government had intervened and succeeded in forestalling untoward results.

"If New Zealand, which depends on its butter and lamb exports, is poverty-stricken because the European Community denies it access to EEC markets," he said, "it will no longer be in a position to make its modest but effective contribution towards ensuring that Soviet expansion does not take place in the region."

In promising to speak up for New Zealand's interests because they were identical with Europe's security interests, he met with Wellington's approval.

His talks in Australia were somewhat different, especially in tone. He was not cold-shouldered by the Australian government.

Premier Malcolm Fraser, to whom he was due to pay no more than a courtesy call, talked with Herr Apel for more than an hour.

But, although the tenor of talks in Canberra was cordial on the whole, a critical note was sounded inasmuch as Australia clamoured for a more substantial European commitment.

Herr Apel agreed in respect of an economic commitment, but Australia would like to see more. Nowhere did he encounter a tougher attitude towards the Soviet Union than in Canberra.

Bonn's view is that the best way to counter further Soviet expansion is to provide the countries in question more economic assistance.

One must also persevere with it, modernisation, of course, in order to keep pace with the Soviet Union, thereby to maintain the balance of power and establish the prerequisites continuation of the policy of detente.

This the Australian Government appeared to feel represented just about the minimum that could be tolerated. Canberra seemed to be much more embittered and upset by the consequences of the Soviet invasion of Afghanistan than other governments.

Australia clearly preferred massive retaliation for Afghanistan and unreserved support for the United States to the more balanced European approach. This is why Canberra plans to step up its military build-up in the years to come.

Herr Apel made it clear that he was not en route as an arms dealer but added that Bonn was willing to supply all three countries with arms as unreservedly as it would sell West German armaments to other Nato countries.

Herr Eberhard, head of armaments at the Defence Ministry, was a member of his party and had appointments in all three capitals.

Japan was mainly interested in the 155-mm howitzer, the Roland ground-to-air missile and the Gepard anti-aircraft system.

New Zealand was more interested in the 122-class German frigate. So is Australia, which is also interested in the 155-mm howitzer and the Troika minesweeping system.

This is all good news for arms manufacturers, but it is also an opportunity of stepping up the European presence which Herr Apel's opposite numbers voiced such keen interest.

This wish must be seen in the context of anxiety over US policy as encountered by Herr Apel in all three capitals.

Everyone was convinced there was no substitute for US power but they were nonetheless in favour of greater cooperation with Europe and a greater European presence.

Karl Feldmeyer

(Frankfurter Allgemeine Zeitung für Deutschland, 2 April 1980)

Kremlin shuts the gate and lives up to its name

Seldom in the past 10 years has the Kremlin been so deserving of its name as in the three months since the Soviet invasion of Afghanistan.

Kremlin means fortress, and the Soviet leaders certainly seem to have dug in deep.

The gates of the Kremlin were wide open for Western visitors from the early 70s, but not any longer; now they are firmly closed.

Words of whatever kind merely ricochet from the high red walls, be they fine words or neat reasoning.

Neither appeals to common sense from the West's neo-realists nor heartfelt words from proponents of detente nostalgia currently carry sufficient weight to penetrate the massive walls of the Kremlin.

More than three months have elapsed since Russia allegedly received an appeal for assistance from Afghanistan. In 100 days the Kremlin has neither uttered a word of good will nor given the slightest indication of seeing sense.

Still less has it shown by constructive action that it takes the West's anxiety seriously.

The most the Kremlin is prepared to concede is the least it demands: business as usual. Nothing more is forthcoming and nothing less is required.

Yet although the Soviet stand has not been likely to give rise to much misunderstanding, surprising contradictions have nonetheless arisen in recent months.

They have occurred in connection with both the Soviet invasion and its inevitable repercussions and its effects and consequences elsewhere.

The list of contradictions is headed by the reasons given for the invasion, which vary according to what seems opportune.

There have been times when Babrak Karmal's two predecessors in Kabul from March 1978 had cried out for assistance for so long that Moscow could no longer turn a deaf ear to their pleas.

At other times the request was made only by Hafizullah Amin, at whose wish Moscow marched in, only to liquidatehim.

On occasion the invasion was necessitated to avert some danger or other that threatened Soviet security.

At yet other times it was rendered necessary by the need to defend Afghanistan's sovereignty and integrity from external attack.

Sometimes the Soviet Union talks in terms of a gigantic imperialist conspiracy, at others it prefers to refer merely to counter-revolutionary elements whose aim to stymie Afghanistan's progress from the deepest Middle Ages to the modern era.

Soviet behaviour in Afghanistan itself

Continued on page 3

The German Tribune

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ANGLO-GERMAN AFFAIRS

Königswinter talks provide chance for extensive exchange of views

Afghanistan, the watershed of a political epoch, was a bone of contention at this year's Königswinter conference, held in Cambridge at the end of March.

It was the 30th annual round of informal talks between politicians, businessmen, academics and journalists from Britain and the Federal Republic of Germany.

The value of these annual encounters is not merely that they bring the two countries closer together; they also provide an invaluable opportunity of exchanging views for three days, hearing at first hand the political views and worries of both.

This year two issues headed the agenda. Was it time the West amended its Ostpolitik? And what course did European integration seem likely to take?

Sir Frank Roberts, a former British ambassador in Bonn, put his point wittily in noting that at past Königswinter conferences the British had reproved the Germans for not pursuing an Ostpolitik; now they were criticising them for overdoing the Ostpolitik.

The Germans, he continued, had used to reprove the British for not belonging to the European Community; now they were wondering why Britain did not simply resign from the EEC.

Both points were clearly exaggerated, especially the last, but they nonetheless hit the nail on the head.

There were clear signs of reciprocal dissatisfaction over Bonn's role in East-West ties and Britain's role in the Common Market.

Of course, ties between Britain and France are much more difficult, not to say tempestuous.

Views differed on how the West should deal with the Soviet Union, and not one analysis of the situation really succeeded.

On the German side this was clearly for the most part because the conclusions speakers were reluctant to reach as regards Moscow already coloured their analyses.

There was, for instance, a repetition of the cool, calm and reassuring statements that Social Democrats in particular have specialised in over the past few weeks.

They included an after-dinner speech by Helmut Schmidt and were felt by some of the German delegates and most of the British to be a little on the weak side.

Social Democratic Bonn MPs such as Horst Ehmke and Peter Corterier warded off this criticism as well as they could.

They mentioned Bonn's aid to Turkey, the three per cent increase in defence spending, the Nato decision to develop a new generation of medium-range missiles and Soviet Press attacks on Herr Schmidt and his Foreign Minister, Herr Genscher.

But their main argument was that Germany had a special interest in detente in Europe, which ought not, if at all possible, to be destroyed by importing crisis from Asia.

The reply to this argument, made mainly by British speakers, was that the Soviet Union could not be interested in adding crisis in Berlin and Europe to the crisis in Afghanistan it already had on its hands.

It thus continued to be interested in its own variety of detente, and what had so far been accomplished by way of detente (such as it is) was unlikely to be ruined by the Western response to Afghanistan.

It had already been seriously damaged by the Soviet Union itself, the argument ran, and before events took their course in Afghanistan too.

So the only way in which the Soviet Union could be warned not to persevere with its policy was by means of an energetic response.

But how were Soviet troops to be withdrawn from Afghanistan, especially as Moscow seemed to be sending in reinforcements at the moment?

The only answer to this question was a reference to the Western proposal to declare Afghanistan a non-aligned country, and diplomats in Cambridge tenaciously upheld the idea.

Yet it is surely obvious that this is no way of persuading the Soviet Union to withdraw from Kabul. Ought the West, then, to support the Afghan rebels, supplying them with arms, for instance?

"No comment" was the almost universal response to this question. Delegates preferred to keep their views to themselves.

Two possible reactions were discussed. They were a boycott of the Moscow Olympics and a military counter-buildup in the Indian Ocean.

Here too the usual sides were taken, although in military terms it was rightly agreed that the West could accomplish nothing in either Afghanistan or Iran by force of arms.

The two sides differed, however, on the mistaken conclusion that any flexing of military muscles by the West would be to its detriment in the Third World in any case.

In answer to this line of thought it was noted that the deterrent could not be effective if there was no military clout with which to deter a potential adversary.

A modicum of Western military presence overseas was needed, although marching orders could only be given if countries in the area in question were in favour.

It came as a surprise to learn that almost everyone at the conference was sceptical about arms control negotiations such as Salt and MBFR.

The only difference was the degree of doubt, especially among pundits who had been following the course of talks for the past 10 or 15 years.

Some of them even now considered arms control harmful. Salt 1 had prompted the development of multiple-warhead missiles and led to the development of both the Cruise missile and the Soviet SS 20.

The tussle over Salt 2 had led to an increase in the American defence budget and was now spawning the MX missile, a project born of anxiety that the Soviet Union might have gained a lead in pre-emptive strike capacity.

Yet no-one was in favour of either adjourning or abandoning arms control negotiations. They were still necessary, if only as a means of ensuring parliamentary approval of defence allocations, most speakers commented in a note of depression.

When it came to European integration the German delegation promptly felt the full force of British anger over the EEC.

It was a three-cornered debate between root-and-branch Labour opponents of the Common Market and British politicians in both major parties who, although dissatisfied with its policies, were anxious to keep Britain in the EEC.

In the third corner were the Germans of all political persuasions, who have largely come to terms with the Common Market's shortcomings and calmly reckon the benefits of membership more than outweigh the drawbacks.

It was obvious, however, that most British delegates, including a majority of pro-Marketeers, regarded the EEC's financial arrangements as more than merely imperfect and absurd.

They felt them to be an injustice, infuriatingly discriminatory, and a virtual tax on British history.

One needs to have experienced this anger to realise why Mrs Thatcher has no choice but to negotiate a substantial improvement in Britain's net contribution to the cost of the Common Market.

Ralf Dahrendorf, the West German liberal academic and former EEC commissioner who is currently head of the London School of Economics, was probably the gloomiest commentator on the state of the EEC.

In Brussels, it was widely agreed, Community policies never materialise because members of the Council of Ministers, the crucial body, exploited the EEC for their own national ends.

This complaint was levelled at both the quality of decision processes and that of the institutions themselves.

There is a general European displeasure with the EEC but in Britain it has polarised into opposing viewpoints.

The one side calls for a last-ditch fight against the Common Market either to reduce it to a mere customs union or to end in Britain resigning its EEC membership.

The other consists of those who call not only for a fresh look at the EEC budget and Common Agricultural Policy but also for changes in EEC institutions.

This led on to the security debate, since one view voiced was that the European Community needs a defence policy department.

A British supporter of the EEC retorted that this was stuff and nonsense. The military needed political control, and if there was not to be a European Assembly capable of reaching binding decisions then at least majority decisions ought to be binding on the Council of Ministers.

Another Labour man, commenting in

Continued on page 4

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is likewise contradictory. Outwardly Moscow denies that Soviet troops are employed for purposes other than the cultivation of friendship with the Afghan people.

In reality the Red Army is not only propping up Mr Karmal; it is also fighting the rebels now there is virtually no such thing as an indigenous Afghan army.

Western visitors to Moscow, especially those of minor political importance such as West German *Jungsozialisten*, are made to feel the Soviet Union would soonest pull out of Afghanistan altogether.

These were the worlds of the Young Socialist leader, Herr Schröder, stating the impression he had gained in Moscow recently.

But Soviet actions indicate the opposite. The Red Army is settling in in Afghanistan just as temporarily as it did in Hungary in 1956 or in Czechoslovakia in 1968.

Afghanistan's cavalierly-treated Foreign Minister Dost recently returned from Moscow and preliminary negotiations on matters relating to "the temporary presence of a limited Soviet troop contingent."

The Soviet leaders at times convey the impression that they are not disinclined towards political solutions. Mr Brezhnev called, for instance, for guarantees from America and Afghanistan's neighbours of an end to alleged outside intervention in Afghanistan.

At the same time the Soviet leader expected these guarantors to underwrite communist rule in Kabul.

But such offers as are made are either dismissed or scorned. This was the fate of Lord Carrington's proposal for neutralisation of Afghanistan, backed by international guarantees.

The same fate befell a later comment by Iranian Foreign Minister Qotsbzadeh that Moscow was prepared to hold talks on Afghanistan.

Tass was quick to deny any such thing, and the emphatic nature of its denial was more characteristic than the denial as such.

Contradictions culminated in connection with detente with the West. Moscow is all in favour of persevering with detente yet for months has sought to avoid any discussion on the subject.

Those who like to do so may regard these contradictions as symptoms of Soviet uncertainty. Uncertain the Soviet Union may well be, but not in connection with Afghanistan.

It is more likely that these actual and presumed contradictions are simply intended to parry the verbal broadsides levelled at the Kremlin walls.

Moscow would like grass to grow over Afghanistan and gain time, especially to consider what kind of policy is still possible with a West that is evidently starting to redefine the form and contents of detente.

The West would be absolutely right to believe that Moscow is reluctant to wave goodbye to old-style detente. It is not only that this might put paid to Mr Brezhnev's life's work. Indeed, the reverse is true: there would then no longer be as many successes as had been notched up in the previous 10 years.

These successes have been less political detente than economic benefit, military prestige and strategic gains in both Asia and Africa.

Eduard Neumaier

(Süddeutsche Zeitung, 1 April 1980)

■ HOME AFFAIRS

Industry's support for Schmidt is in sharp contrast to the past

A large section of industry in the Federal Republic of Germany regards Helmut Schmidt as the man to lead the country into the 1980s.

This attitude is in sharp contrast to that of the beginning of the 1970s, when industry regarded the economic policies of Willy Brandt and the SPD/FDP coalition as the root of all evils.

The suspicion went so far that at the end of 1971, industrialists published an advertisement attacking these policies.

They feared "structural change which would hit the entire national economy and threaten jobs."

Serious economic and social effects were forecast.

The predictions proved wrong. The economy continued to strengthen in the following years, although Willy Brandt remained Chancellor. The first serious crisis came with the huge increase in oil prices in 1973 — but this had little to do with the government's policies.

Today, nine years after the warnings from the German industrialists, the SPD/FDP coalition is still in power. And many of the critics of 1971 still belong to the elite of industry: Eberhard von Kuenheim is still managing director of BMW; Hans L. Merkle is still chairman of Bosch in Stuttgart; Rolf Rodenstock, spectacle-maker from Munich, is now President of the German Industry Association (BDI); Toni Schmücker has since left Rheinstahl to take over the chairmanship of Volkswagen; and Otto Wolff von Amerongen divides his energies between the Wolff group and the German Industry and Trade Conference (DIHT).

These men have not only made peace with Schmidt, they are even on the same wavelength as the successor of the unloved Willy Brandt.

Chancellor and industrialists know they agree in their assessment of the situation. They meet regularly in joint efforts to find solutions for problems.

The initiative comes from Schmidt. the *Frankfurter Allgemeine Zeitung*, which no one could accuse of excessive sympathies for the SPD/FDP government, described it as "felicitous" that the Chancellor sought a dialogue not only with the trade unions but also with the bosses. The United Kingdom, France and Italy have so far not managed to follow the example of such a social dialogue.

Unlike his rival for the Chancellorship in the next general election, Franz Josef Strauss, Helmut Schmidt does not have to woo the leaders of industry. No industrial leader today can turn down an invitation to Bonn or Hamburg — and most of them are glad to come.

This is not only — as CSU general secretary Edmund Stoiber argues in *manager magazin* — because Helmut Schmidt is head of government. Of course this plays a part. But most German industrialists now believe that Helmut Schmidt is the better choice.

The bosses at least of the major industrial concerns believe that they will be better off with Schmidt as Chancellor in the 1980s than with Strauss. They think Schmidt is more capable of coping with the difficulties that will arise in coming years as a result of scarcer and



dearer energy and the slowdown in growth this will entail.

There will be less to go around, and the struggle for income between employers and wage-earners threatens to become tougher.

Both Stoiber and deputy CDU leader Kurt Biedenkopf believe that the views of big industry are not representative of industry as a whole. Stoiber sees small businesses as the backbone of his party and in an article in *Handelsblatt* Biedenkopf stressed the importance of medium-sized firms, concluding that there was no rejection of Strauss as a candidate for the chancellorship "in industry".

Both underestimate the influence the opinions of leading industrialists on the merits of the Chancellor and his rival have on other sectors of industry.

These captains of industry are credited with possessing sound information on which to base their judgements. So other industrialists pay particular attention to what they think.

The praise for Schmidt and the criticisms of Strauss from top industry sound astonishing when one considers what a change has taken place in the past ten years. Hardly any of these leading industrialists are prepared to be quoted by name. But in internal circles and to chosen journalists they make no secret of their wish for the present coalition to be re-elected — and they know that use will be made of their opinions in leading articles.

Unlike 1971, they are not willing to commit themselves in public. Bosch boss Merkle resigned from the CDU a year ago, and stressed at the time that his resignation had nothing to do with the nomination of Strauss as candidate for the chancellorship. However, he was perfectly aware of the conclusions that would be drawn from his resignation at that time.

Despite their clear decision in favour of the present coalition, industrialists will not be conducting any kind of spectacular public campaign a campaign as in 1971. Their sympathies lie far more with the than with the party. The feeling is certainly mutual.

Most Social Democrats are sceptical of most of Schmidt's industrialists friends. And many industrialists would refuse to support any possible successor to Schmidt.

It is only with Schmidt that they feel sure that "socialist tendencies" will not gain the upper hand.

Of course we cannot expect a clear statement of support for the Government comparable with the attacks on Brandt in 1971. Why should industry put itself publicly in that line?

The bosses of big industry have learned the lesson of the early seventies: massed support for Opposition candidate Rainer Barzel proved a failure. Willy Brandt was re-elected.

Richard G...

(Die Zeit, 21 March...)

Story of the candidates is in the faces

The longer the election campaign goes on, the more stereotyped the faces of Helmut Schmidt and his challenger Franz Josef Strauss become.

Schmidt tries to look statesmanlike and even more serious. And Strauss — probably on the advice of his campaign managers — starts to smile as soon as a photographer comes into sight.

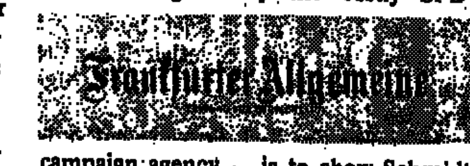
Perhaps Lavater's *Physiognomic Fragments to Aid Knowledge of Man and Love of Mankind* could give us some clues. There is a saying that after turning 40, everyone is responsible for his own face. And besides, the face does not lie.

When Schmidt was photographed with President Carter and their respective wives, he proved his ability to react quickly, conjuring up a fleeting smile as he looked into the lenses of hundreds of photographers. But the smile lasted only as long as the cameras were clicking.

Strauss is completely different — as his expression when he goes to meet Carter shows. Muted seriousness changes in seconds to the exact opposite. Strauss seems to be saying: Take a good look at me, Mister Carter, and listen carefully, and you'll see that I am not the devil's advocate at all really. That is only what Schmidt thinks.

The Germans still have the habit of bowing to monarchs and presidents. Schmidt and Strauss also bowed to Carter though Carter did not return the gesture. And American ministers did not make the ghost of a bow to Schmidt and Strauss. There are dozens of variations of bows, from the slight inclination of the body to the nod of the head. Americans and Germans are somewhat different. One would like to warn of the illusion that the Germans have softer spines.

Schmidt and Strauss differ in the choice of vocabulary and sentence structure in their speeches, and their facial expressions are different also. Schmidt circles say that their aim — and this is the advice given by the costly SPD



campaign agency — is to show Schmidt as he is.

Schmidt does not want any changes made to his face. He said "no" to campaign managers who wanted him to wear different glasses or a different tie. He objects to image cultivation.

Schmidt does not want any fuss made of him, it seems. Perhaps it is meant to seem so. He enters a room serious-faced, dragging his feet slightly, whether be a cabinet meeting, a press conference. This is a form of acting. Schmidt acts the part of the statesman.

Helmut Kohl said recently that Helmut Schmidt deserved a medal for his acting ability. It is clear that Schmidt has changed his debating style in recent years, even risking giving the impression that he has lost his thread on occasion. He speaks reflectively, even gently. Laughter as part of the cultivation of image is a thing of the past.

The days when as a young ... Schmidt made his famous "... weapons speech" (1958) are ... Herr Kiesinger of the CDU said at the time: "I am ashamed for the whole parliament that this speech has been ... here ... the speech we have just had to listen to was a bucketful of swill ... over this house."

That was a long time ago.

An election brochure on Franz Josef Strauss was published recently. The ... The politician. The CDU/CSU. ... The cover shining black; the CDU/CSU also uses the services of an expert advertising agency in its campaign.

Strauss smiles: with Margaret Thatcher, Giscard d'Estaing, Sadat, Mao Tse-Tung, Brezhnev. Helmut Kohl smiles too. There is only one picture of an ... smiling Strauss, sitting at a desk, a ... of papers waiting to be signed, holding his glasses in both hands, wedding ring on his left hand ring finger, looking straight and straightbacked into the camera.

The toga of the statesman hangs ... visibly around Strauss. There is no doubt: he is the dominating figure.

The American Julius Fast, an expert in non-verbal communication, says that "of all the parts of the human body used to transmit information, the eyes are the most important." The eyes of Strauss and Schmidt also communicate nuances. It looks as of Schmidt and Strauss are hiding, one behind the mask of the serious statesman, the other behind the unmotivated smile of the politician, in an election period: two character actors.

Walter Henkels

(Frankfurter Allgemeine Zeitung für Deutschland, 28 March 1980)

Königswinter ta...

Continued from page 3

another context, said he was ... raid the federalists, who had lost ... the functionalists in Europe in ... had been right after all.

Institutional inability of the European Community to formulate and ... EEC policies was the root cause of ...wing political dissatisfaction with the Community.

Politicians, incidentally, would do well to note that there were too few of ... number holding office in Germany, especially in the Bonn coalition, at the Cambridge conference.

Horst Ehemke and Peter Corterier represented the SPD, Heinz ... Richard Jaeger, Matthias Wissmann ... Walther Leisler Kiep the CDU/CSU.

They were much too few, both in comparison with previous Königswinter conferences and in relation to the ... number of British politicians present ... either held office or were close to the corridors of power.

Günther Gillessen

(Frankfurter Allgemeine Zeitung für Deutschland, 1 April 1980)

■ DEFENCE

Arms renewal starts, but 'lack of manpower is a problem'

Afghanistan jogged the West into rethinking its military strategy but unfortunately the West seems to be moving in the wrong direction.

The United States is to spend millions modernising its armed forces and the Bundeswehr is buying new, extremely effective weapons systems. Bonn Minister of Defence Hans Apel proudly announced recently that DM50bn would be made available for the purchase of "the next generation of highly effective weapons" in the 1980s. The problems of the organisation of the armed forces had also been solved, he said. Apel also warned against premature criticism of the army's efficiency.

But there are grounds for criticism. West Germany and the United States are building up a Valhalla of military myth. But what the two strongest Nato countries lack is soldiers. However much the United States rearms, it will not regain its military freedom of action until it reintroduces compulsory military service.

The Bundeswehr, on the other hand, is like a fully armoured knight whose amour is simply too big for his small body.

And the reform of the armed forces will not reduce the shortage of manpower in the armed forces. The reorganisation will not improve the army's striking power and the increase in the number of brigades is not fooling anybody: 36 smaller brigades are no better than 33 larger brigades on the field of battle — 495,000 men, and even this is probably an over-optimistic estimate, are not enough.

The Defence Minister said that along with the reserves, this number would "enable us to increase our strike force rapidly and without general mobilisation in times of increased tension." This would not convince any troop commander, because the Bundeswehr not only lacks troops, its lacks a solid substructure.

West Germany and the U.S. have technically highly qualified troops but not enough of them should there be war.

However, the means to make up for the loss of material in battle are not available. And there is a loss of material in the widest sense of the word within Nato. If the nuclear deterrent should fail and the unthinkable happen, most of our Nato allies would have to face the same difficulties as West Germany and the United States: there have been no preparations for transforming a peace into a war economy.

It can be predicted that men badly needed in the economy would be drafted into reserve units. There is no organisation that could deal with problems of this kind if a crisis were to flare into war. The botched planning of the British and French during the Suez crisis plunged the British economy into chaos within a few weeks and a similar disaster would probably recur throughout Nato.

If the Americans were in a position to send an army corps as reserves or reinforcements to Europe, these troops would at first be immobile. Thousands of lorries would have to be "found".

Drivers would have to be diverted from elsewhere to transport them through the most difficult traffic conditions to a goal which they would probably reach too late. The Bundesbahn does not have a mobilisation plan, even though the Bundesbahn as our largest transport organisation would be the ideal body to coordinate overall transport management.

There would also be no replacement for ammunition. Spares for Leopard tanks would have to come from the 1,500 companies working for the arms industry.

There is still no organisation within Nato to ensure the flow of energy. Energy would have to be transported to military and civilians by road and rail from the production points via the depots.

The strategic need for the long term husbanding of supplies is also not appreciated. The Americans would not have needed to bear the risks and burdens of the Normandy invasion in 1944, for today we know that the German armaments industry then only had six months' supply of chrome left. And Hitler's empire would have collapsed anyway — for want of raw materials. And the Nato states would have to enter a war with a shortage of raw materials, unless they could prevent it politically.

The Atlantic Alliance has little of anything in reserve. This is most evident in terms of military equipment: it took two years to meet the Bundeswehr's real requirement of anti-tank weapons. And it would take even longer to replace tanks knocked out on the field of battle. And where would all the military vehicles and their replacements coming from with the war gobbling up material?

Why is it that the most powerful industrial nations of the world plan their own defence so blindly? One reason is that politicians, diplomats and the military are interested mainly in seeing tanks, planes and warships. They equate this with security. And in the panoply of military strength, they forget that security is more than the existence of a sum of weapons. It requires the strategic storage of supplies and a supply system tailored to long-term needs.

Another problem is that contacts between the military bureaucracy and the government administration with industry are not close enough. Strategic planning is more than lobbying. And then the entire West still seems to be thinking in the categories of the First and the Second World War. They take time when it comes to the prevention and the possible waging of war. It took the Americans four years from 1940 to strike the deadly blow. It looks as if they and Nato believed that they can take the same amount of time in the atomic age.

Of course democracies cannot put their economies on a war footing in peacetime. What they can do is to increase the efficiency of their industries and the initiative so that security policies can be pursued if this is necessary and genuinely deter a potential enemy.

At the moment our deterrent strategy is not very credible. A potential enemy can simply work out when out military system of deterrence will be physically worn out and our raw materials capacity used up. He can then precisely calculate his own risk.

Adelbert Weinstein

(Frankfurter Allgemeine Zeitung für Deutschland, 27 March 1980)

The soldiers' trade union takes militant line

The trade union of the three services, the Bundeswehr Association, is demanding improved conditions and more pay for its members.

Leader of the association, Colonel Heinz Volland, represents 250,000 servicemen — half the armed forces ranging from privates to generals.

Effectively, he has the power of a trade union leader.

Volland has been chairman for the past 13 years and, within the association, is senior to his military superior Jürgen Brandt, General Inspector of the Bundeswehr.

For most of the past 13 years, the association has kept a low profile and generally been regarded as loyal to the political and military leadership and moderate in its aims and demands.

However, Colonel Volland has now changed his tune, and his demands sound more like sabre-rattling than moderate advocacy of soldiers' claims.

He said that if there was no response in the Bonn Ministry of Defence to his demands for improvements in soldiers' social situation, then "extraordinary measures" would have to be taken. By this he means not only handing out leaflets and holding demonstrations but even going to the Federal Constitutional Court.

Volland argues that Paragraph 31 of the Soldiers' Law justifies his claims. This paragraph deals with the state's obligation to look after soldiers' welfare. Volland argues that sailors who have to work up to 70 hours a week on board ship without getting overtime or holiday in return are not being adequately looked after by the state.

He also criticised the Ministry of Defence for transferring 24,000 soldiers' families every year without providing suitable accommodation.

Another complaint is that soldiers operating fully electronic Leopard II, Marder and Gepard tanks are only paid N.C.O.'s salaries when they ought to have higher status.

The larger the Bundeswehr association, the greater Volland's obligation to defend their interests as powerfully as possible. Frustration in the armed forces means that Volland has the support many a trade union boss might envy.

Of course there are those in the military establishment who would like to see Volland taken down a peg — but there is nothing they can do. Colonel Volland does not receive a Defence Ministry salary. He is exempted from service as leader of the association.

He is not prepared to go as far as some teachers, for example. He rejects the idea of soldiers striking, describing this as "utopian." He does not want soldiers to break the law and does not approve of moves such as working to rule.

Horst Wisser

(Hamburger Abendblatt, 31 March 1980)

Concern over cost of aircraft

The cost of producing and developing fighter planes is becoming prohibitive. The Bonn Ministry of Defence cannot meet development costs for these new planes from its own budget alone.

Defence Minister Hans Apel recently said: "I am not prepared to develop the Tactical Fighter (TKF) of the nineties. It just cannot be paid for." Apel also said that the costs of the new fighter to be introduced in 1980/81 were still rocketing. The system price for one fighter is moving towards DM100m.

Defence Ministry experts confirmed that the system price for the Tornado now stands at DM62.5m, but this is being pushed up rapidly. By the time the last Tornados are being introduced, the price will probably be around DM85m.

Despite these pessimistic noises, the project for a TKF for the 1990s has not been abandoned. The Ministry of Defence is hoping that other ministries will contribute towards costs. Development costs for the TKF are estimated at around DM10bn by 1989. If the British and the French were to take part in the project, West Germany would pay about DM3.5bn towards it.

It is not, however, just a matter of the TKF. Military aircraft have always been the vanguard of the aircraft industry: they are the putting into practice of the latest technological breakthroughs in aviation. So if there is not sufficient investment in this sector, it becomes tough to keep pace in the civilian sector. And what is at stake is not only the German but the European aircraft industry.

Secretary of state Snell of the Ministry of Defence said: "If the three nations want to support their own civil aviation industries, they will have to finance the development of TKF. And we also need a substantial contribution from another source over and above the normal development allowance in the Defence Ministry budget."

In other words other ministries would have to make up the difference — for instance the ministries of Research, Economic Affairs or Finance. All three are strongly opposed to the idea, even though the Ministry of Economic Affairs has played a major part in financing the Airbus project.

Defence Ministry officials are now waiting for the results of a report from the French, British and German aviation industries on the TKF. After this, the position will be clearer.

The question of costs remains. There is a bon mot from the aviation industry going round at the moment: The three countries who want to build the fighter of the 90s have agreed — that they have no money.

Helmut Berndt

(Bremer Nachrichten, 29 March 1980)

BUSINESS

Squeeze only one cause of stock market trough



Stock market trends in Germany can only be viewed with equanimity by those whose commitments are none too heavy. Quotations have slumped 11 per cent on average since 25 February.

This is roughly equivalent to the losses investors had to grin and bear all last year. It was small consolation that quotations last year recovered six per cent or so between New Year and the end of February.

Gains have since been more than offset by losses. It is a case of here today and gone tomorrow.

There is no shortage of explanations advanced to account for the sickly state of the market. The main reason, of course, is the credit squeeze imposed by the Bundesbank.

For weeks banks have been keenly short of liquidity and the situation had deteriorated as speculative foreign investment has pulled out and headed elsewhere.

US interest rates exercise a powerful attraction and the deutschemark looks more in line for devaluation than its usual actual or effective revaluation.

As long as this is the case there will be little incentive to invest in either German stock markets or in fixed-interest securities.

In addition to these essentials there has been a number of extraneous factors that have contributed towards investors' reluctance to commit themselves.

Economic prospects for 1980 are distinctly poorer than in the past, so industry does not expect to make as much in profits as in 1979.

An investment consultancy has just forecast an average five-per-cent decline in profits. Growth rate expectations have been reduced and fears of higher unemployment are no longer dismissed as excessive pessimism.

Other, framework factors are far from satisfactory. Federal, state and local government authorities are making little headway in pruning their debts.

At least DM 30bn will need to be raised over and above current revenue this year, and that is a conservative estimate!

The wage agreement negotiated by the public service unions, 6.3 per cent across the board and an overall equivalent to 6.6 per cent, is already felt to have been out of all proportion to the spending deficit.

Financial planning can obviously be rewritten, for both this and other reasons. The Federal government, for instance, will be called on to invest hundreds of millions of deutschemarks in extra commitments.

This will be in addition to whatever extra defence spending proves necessary.

So the framework and outlook for the stock market are anything but encouraging. Last year was a poor year and investors have shown greater reluctance to invest in 1980.

There has, for instance, been a net cash outflow from unit trust specialising in blue chip stock rather, say, than fixed-interest securities.

Besides, investors are clearly opting for fixed-interest bonds, interest rates holding forth a distinct possibility of outstripping inflation.

Public company shares quoted on the stock market just cannot keep pace in percentage returns on investment, and quotations are unlikely to tempt investors just yet.

Yet the year as a whole is unlikely to prove as abysmal as currently seems probable. Quotations could fall even more and further losses are by no means out of the question, but two factors hold out hope of improvement.

First, West German shares have grown so inexpensive they might well become a more interesting proposition for foreign investors.

Second, the Bundesbank cannot indefinitely maintain its stability policy, gratifying though it may be. There is sure to be increasing pressure to prime the economic pumps and allow banks more leeway.

It remains to be seen when the Bundesbank governors in Frankfurt decide to take their collective feet off the brake pedal, but they will have to do so sooner or later this year.

Further improvements in the overall circumstances can only be envisaged in terms of speculation. But in view of the empty public coffers next years's primised tax concessions seem out of place.

What use it is to taxpayers if tax cuts go hand in hand with growing public deficits and the inevitable increase in inflation with which they will be required to foot the bill?

A bold plunge to dispense with election year tax cut promises would both improve the Bonn government's financial position and create leeway for healthier developments on capital markets.

Tax cuts would, after all, be anything but free gifts. Taxpayers and consumers would soon enough be called on to foot the bill.

This, in conjunction with a Bundesbank stability policy aimed at consolidation, not strangulation, could prove a breath of fresh air for stock markets.

After a poor market year last year and an even worse first quarter this year this would be distinctly desirable, especially as share capital continues to be an indispensable source of company finance.

In this context might not shares be in need of a popularity boost altogether? They could, for instance, be made a more attractive choice as a savings scheme investment.

Stock exchange turnover tax could be abolished or a compensatory levy imposed bank and bond loans. Exemption from capital gains tax could be increased. French measures could be adopted.

Since mid-1978 private householders can write off against tax over a three-year period up to 5,000 francs invested on the stock exchange.

The only proviso is that shares offset against income tax must not be sold for four years.

Yet even if less extensive measures were undertaken, politicians could do worse than devote thought to ways and means of popularising investment in the stock market.

(Der Tagesspiegel, 30 March 1980)

More expor[ts] to the Third World

Seven hundred thousand pe three per cent of the work fo employed in manufacturing finis semi-finished goods exported to ping countries.

This statistic has been comp the council of scientific advisers nomic Cooperation Minister Rai fergeld.

In 1977 and 1978 these exp creased by DM5.4bn, thereby 60,000 new jobs, but at the sam imports of finished and semi- products from the developing co were up by DM2.3bn.

Imports rendered 30,000 jobs fluous, so the net gain from trade ished and semi-finished goods Third World in 1977 and 197 30,000 jobs.

Public-sector development aid ha had a positive effect on employm accounting for about 50,000 jobs.

Although only about one per c bilateral aid is tied to deliveries fr Federal Republic of Germany ab per cent of the cash flows bac West German pockets via orders German companies.

In multilateral development p the reverse flow quota is substanti excess of 100 per cent.

Electrical and mechanical engin motors and chemicals, which are dustries with a high export quota the chief beneficiaries from public tor assistance.

In overall economic terms the was minor, however. "The total exp potential of development aid amoun

Continued on page 7

Commodities: anticipating the trend?

Has the third post-war commodities boom come to an end? Three weeks ago Ifo, the Munich market research institute, reckoned the boom would continue. But Mr Carter's anti-inflation programme has put a spoke in many a speculator's wheel.

Yet what difference does this programme make? Does everyone who rushed to invest cash in gold, silver and platinum now seriously imagine the risk of inflation has been eliminated? Surely not.

The crucial factor must be sought elsewhere. The motive force behind the boom, which began in mid-1978, was the cyclical upturn in the industrialised countries.

As their economies picked up, demand for raw materials increased, and supplies were scarce.

There are now widespread fears that Mr Carter's anti-inflation programme in the United States will led to a worldwide economic downturn.

The demand for copper, tin, silver and platinum would then likewise decline, so commodity exchanges are clearly anticipating a trend that could well set in over the months ahead.

A leading Swiss bank rightly noted in its latest report on commodity markets, however, that "the real economic situation in the Western industrial countries" has not deteriorated to the extent that a slump in commodity prices is warranted.

It seems more reasonable to assume that the steep increase in interest rates is the main bugbear.

High interest rates make stockpiling costlier for processers, who accordingly run stocks down rather than go to the expense. They also discourage speculators from running the risk of committing their cash.

US Treasury bills currently earn nearly 16 per cent. Why run the risk of speculating on commodity markets when such a high return is available at next to no risk?

Besides, commodity markets have been decidedly bullish in recent months, so the price fall is merely a technical reaction to the exaggeratedly high prices paid, say, in January.

Even after the latest slump quotations are seldom lower than on 2 January. Some, such as the prices of tin and platinum, are still higher than when trading started in the New Year.

Is the technical response indicative of a wider turning-point? It remains to be seen.

The dramatic price drop is only accurately reflected in Moody's Index. In dollar terms it dived 18 per cent or so last month, whereas the sterling-based Reuter's commodity index was down by a mere three per cent.

This is partly due to the revaluation of the dollar against sterling, necessitating marking down dollar prices against their sterling equivalents.

But this wide percentage dispa also due in part to the differing up of the two indexes.

With few exceptions all commo have been affected by the price de however, although non-ferrous and p cious metals took a heavier knock t soft commodities.

Among non-ferrous metals tin surprisingly well, especially as United States has announced its i tion of holding regular tin auctions.

Once a forthnight 500 tons are sold from US strategic reserves, the government has announced.

One of the few commodities that run counter to the trend and incre in price is cocoa, surprisingly inas as the prospects of a new internatio agreement to replace the one that ed on 31 March are gloomy.

Last-minute agreement on a mini price could well have led to further bilisation of the cocoa price.

Coffee to held its own. Export estimates have been slightly down, so this is probably the basi son why.

Besides, there have been rumours New York that the Bogotá Group eight Latin American producer coun plans to buy on a large scale to push prices.

Speculative purchases evidently lowed in the hope of capitalising on alleged move by producer countries.

Sugar has stayed fairly stable over past month, but in its case the cu quotations are well below the y highest.

Leo Fischer

(Die Welt, 31 March 19[80])

WHITE-COLLAR CRIME

Commodities futures swindles continue despite flood of prosecutions

...ere has been a spectacular increase in ...tion against commodities futures deal...rs because of allegations of fraud. In ...mburg alone, 17 such companies in ... series of actions were closed down ...st month. Each year, people are swind...d out of about DM0.5bn. The methods ...f deceptions are similar, with glossy ...ochures and a system of telephone ...les promising profits from price rises ...from raw materials such as sugar, gold, ...opper and cocoa. Cash exchanges hands, ...nd only later does the victim realise that ...e has been cheated.

The Wiesbaden public prosecutor, Dr Hans-Georg Gördeler in 1978 wrote ...letter threatening legal action to an ...vestment and financial advisory com...any called Redlich.

"If the commodity futures deal should ...rn out in any way to my disadvan...ge," he wrote, "I will unfortunately be ...bliged to subject your office and that ...the Fear company to an investiga...ion."

The letter, to Dr Redlich, dealer in a ...uture commodities transaction for the ...ffenbach company, Lehnert, added: ...This means for you and your associates ...in Offenbach and in Switzerland that ...the three branches can be closed at short notice and that you and your asso...ciates can reckon on being arrested and put on remand."

A month later, Redlich was extremely obliging to his client, Gördeler. He said that Gördeler could pull out of the soya contract and that the sum of DM30,000 plus interest would be transferred to him.

All seemed well with the world after that. Public prosecutor Gördeler had his investment back, had decided not to prosecute the clearly dubious operators, and Redlich, Lehnert and "the gentlemen from Switzerland" continued happily as before: for another year they swindled investors of at least DM3m.

The swindle did not come to light until autumn 1979, by when Gördeler had put his investor's luck and the soya beans to the back of his lawyer's subconscious. It was not Gördeler, but his public prosecutor colleague, Karsten Koch, from Darmstadt, who closed Lehnert's Offenbach office, brought company owner Hans Walter Lehnert to court and threatened to clear up the operations that had emerged in the Offenbach-Darmstadt-Frankfurt industrial triangle.

Lehnert's arrest and sentence was followed by a series of arrests of other future commodities dealers: in Munich, Düsseldorf, Berlin and more recently in Hamburg, companies were closed, over 100 in all.

In the Bundestag a dozen SPD MPs have put down a question about future commodities swindles. Herr Haehser, secretary of state at the Ministry of Finance, estimated that the damage to the national economy as a result of such activities went into billions of deutschemarks. About 30,000 German investors are swindled out of at least DM0.5bn every year.

In the United States, there is now a whole bundle of legislation protecting the investor against these swindles. This country still has not laid the foundations for sinilar laws. And there is hardly likely to be reform legislation to combat this form of theft before the general election.

However, even if the legislative gaps were to be closed, there is still no adequate apparatus for applying such laws. Secretary of state Haehser had to concede that: "The trade supervisory bodies of the *Länder* have already pointed out that they are neither quantitatively nor qualitatively in a position to judge companies dealing in commodity futures and the correct conduct of their business." The same applies to the courts and the police.

Although many of these companies disappear overnight, one thing is sure: others will shoot up to take their place.

And it is almost impossible for the outsider to distinguish the serious from the dubious operators. All of them create an aura of credibility with their impressive glossy brochures.

All are helped by the economic situation, the increasing inflation rates which are worrying many holders of capital. In such a climate, the promise of "up to 400 per cent profit" is very tempting.

The layman is completely baffled by the labyrinthine complexities of the future commodities markets. And this is just what the dubious companies are counting on.

Clients regard these dealers as having access to brokers and as relieving them of the complex and time-consuming job of finding out about and buying or selling options.

In reality all these dealers are often doing is relieving them of their total investment. Hardly any of the dubious companies have anything to do with market transactions. Their so-called brokers often turn out to be bogus. In the case of Future Trading Consults, based in Frankfurt and Munich, the brokers were a company called McShannon.

And as chance would have it, this company belonged to the mother of an FTC manager. It is unlikely that the broker in this cased is officially registered on the market — especially as there are no German-based brokers, only branches of foreign brokerage companies.

"Sales pros and investment advisors for our offices in Frankfurt city centre" are the words with which future commodities firms advertise for "raw materials salesmen."

They promise monthly incomes of at least DM5,000. The most important aid to the telephone salesman is a list of well-heeled customers. Salesmen with good address lists are worth a lot, often getting down payments of DM10,000 when they sign on.

Former commodity futures dealer Hans-Walther Lehnert, in prison since Ash Wednesday, says: "The clients make business so easy for us. One doctor gave us DM800,000 and even took out a loan for half of it. A master butcher gave us a cheque for DM120,000, an apothecary quietly handed a cheque for a quarter of a million over the table."

In many cases the money is so readily available because it has not been declared to the German taxman. The motto for the investors here is "whitewash black money" — as profits from stock-market speculation are not taxed. From the tax law point of view, future commodities are not speculation but a kind of lottery in which prizes can be won.

At least three of the future commodities dealers arrested in recent months came to attention as long ago as 1977 and 1978. The managing director and deputy managing director of the Munich company RLA were both arrested recently, but the company continues to operate under a different name.

By the time investigations are finished, the "entrepreneur" can have taken himself and his bogus companies to the Channels Islands. This is what the dealers call going underground.

There seem to be no limits to the imagination of these dealers. There are now firms offering protection to swindled investors. Victims have to pay a fee of DM600 to bogus "commodity future investigation companies" in return for which they receive a promise that these companies will "take action" against dishonest companies. Interesting enough, those offering protection against swindlers are often precisely those making huge killings out of swindles elsewhere.

Commodity futures dealer W. showed remarkable flexibility. When the lid was blown on his company, FRK, he escaped abroad and founded Campinada, with headquarters in Panama.

Shortly afterards, he transferred the company headquarters to the UK. In London, right opposite the Dorchester Hotel, W. drew up futures contracts as he had in the past. When Frankfurt lawyer Heinz Hupfer and a client whom W. had swindled out of a five figure sum turned up in London, they found a familiar scene: the company was housed in a rented flat. The company owner was sitting in a small room doing big raw materials deals "world wide."

Edeltraud Remmel

(Frankfurter Rundschau, 29 March 1980)

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...no more than five per cent of total exports," the advisory committee concludes.

...It this advises against an increase in pegging aid to orders. The additional benefit of 23,000 jobs on the home market was felt not to warrant the disadvantages.

Bonn's negotiating position in the North-South dialogue would deteriorate as a result, and so few extra jobs at home would in no way compensate for the disadvantages the developing countries themselves stood to suffer.

In view of plans to step up aid in the years ahead, especially to less-developed countries, a reduction in balance-payment, employment and budgetary effects could not be discounted.

The least-developed countries had a ...ticly limited capacity for ordering capital goods. They would be more like... to invest in the consumer sector where West Germany was international... less competitive than in capital goods.

(Handelsblatt, 1 April 1980)

The system

Future commodities deals have a long tradition. The biggest turnovers are still made in direct dealings, the traditional form of such financial transactions.

The producers of the goods, along with dealers, large amounts of capital and speculators, are involved. A report by the economic information organisation Schimmelpfeng describes direct dealings as follows:

Contracts for certain amounts of goods at fixed prices at a future delivery date are drawn up. If the paper purchaser is not interested in receiving the goods, it does a deal of equal value with the seller, thus avoiding the obligation to take delivery. As the price of the goods bought fluctuates daily on commodities markets, the goods previously bought or sold empty (i. e. without taking delivery) can be resold. The speculator then makes a profit or a loss.

Only investors with considerable capital can engage in these direct deals, as 10 to 15 per cent of the price of the goods is retained as security. If the speculation fails, the purchaser even has to make an additional payment. The procedure is rather more complicated in the case of future commodity options in which dubious dealers dabble. Here, the speculator, through a future commodities dealer (who, in turn, operates through a broker), acquires the claim to a direct commodity deal on the commodities market.

For the purchase of an option on a sugar or a cocoa contract, the premium to be paid is only DM5000 to DM7000 — and this is the bait for the small fry. This premium always goes to the broker, regardless of how the deal goes.

This means that it is lost from the start. A profit is only made when the increase in value is greater than the premium; only then is use made of the option. If the development of market prices goes against the speculator, he loses the premium. In the case of fly-by-night dealers, there is a risk that the money will not even be handed over to a broker, but immediately stashed away in a private account.

■ TECHNOLOGY

New satellite claimed to mark start of an era in telecommunications

It is just a matter of course nowadays to dial trunk calls to other countries and continents and watch international events such as the Winter Olympics live on TV.

Yet it is only 15 years since Early Bird established the first satellite TV link across the Atlantic.

Early Bird has since given way to any number of successors. The present Intelsat 4A is the fifth generation of telecommunications satellites.

Later this year the first Intelsat 5 satellite is due to be launched and will, it is claimed, mark the beginning of a new era in international telecommunications.

The new relay satellite will be able to handle two colour-TV programmes and 12,000 telephone calls simultaneously. Intelsat I could only manage either 240 phone calls or a single TV programme.

Over the years the cost of operating a telecom satellite has steadily been pruned. In 1965 the cost of maintaining a transatlantic telephone link was 32,000 dollars a year; now it is a mere 5,700 dollars.

Intelsat, the international body, was set up in August 1964 by 11 countries, including West Germany. It now comprises 102 countries, each of which owns a share in the organisation in keeping with its use of the satellite network.

The United States owns the largest individual stake, nearly 25 per cent, and thus has a major say in the running of Intelsat.

Comsat, the US communications satellite corporation, is responsible for practical implementation of programmes.

West Germany owns a 3.1 per cent stake in Intelsat and ranks sixth, trailing behind Britain, France, Brazil and Japan.

The Intelsat network consists of 10 working satellites perched in orbit 36,000km above the Atlantic, Pacific and Indian Oceans. A further four satellites are also aloft as stand-ins.

At the end of 1979 the network had a capacity of 35,000 telephone channels. By 1985 demand is expected to reach 92,000 channels.

With the current growth rate standing at 20 per cent a year demand should be up to 300,000 satellite telephones lines by the mid-90s.

This steady increase presents problems for technicians in particular, since the number of frequencies available is strictly limited.

The current frequency range of 4 to 6 gigahertz, or billion oscillations per second, is already fully booked, so the new Intelsat 5 range has branched out into the 11 to 14 gigahertz range.

The new range is fraught with problems, since the higher the frequency the greater the influence of meteorological phenomena such as rain, snow and fog on the quality of transmissions.

As a result both satellites and ground stations need higher output, but the difficulty is that the 11 to 14 gigahertz range will be exhausted by the end of the 80s too.

From then on telecommunications will have to make another move, to the 20 to 30 gigahertz waveband.

The first Intelsat 5 satellite is due to be launched this autumn. It was originally scheduled for last year, but delays were caused by difficulties with the new devices with which the satellite was to be equipped.

These problems have now been solved and the delay will not upset international telecommunications in any way.

Seven Intelsat 5 satellites are currently envisaged. Wholly or partly they will replace the existing Intelsat 4 and 4A range.

The first four will be launched by Atlas Centaur rocket. Nos. 5 and 7 are due to be put into orbit by the US Space Shuttle. No. 6 is to be launched by the European Ariane rocket.

Three or four years ago it would have been inconceivable that Intelsat could even consider launching its satellites by any rocket other than a US one.

Technically Intelsat 5 is a far cry from its predecessors. I is the first range to incorporate triaxial stabilisation; its forerunners have all been stabilised by rotating several times a minute on their axes.

Intelsat 5, however, retains its vantage point towards the earth's surface. Its stabilisation system was devised by Messerschmitt-Bölkow-Blohm, a West German company with previous experience in this field.

MBB were associated with the Franco-German Symphonie telecom satellite and have a 10 per cent-plus stake in the Intelsat 5 range.

The too is a "first." Never before has such a substantial stake in an Intelsat project been allocated to a non-US firm.

The two colour-TV program[...] 12,000 simultaneous telephone [...] can be relayed by Intelsat 5 [...] per cent improvement on the [...] 4A capacity.

The satellites' six transmissio[...] will in some cases cover conti[...]nents, while other dish anten[...] concentrate on areas with a hi[...] phone density, such as New Y[...] US eastern seaboard or central E[...]

Existing frequencies can be [...] fourfold use by Intelsat 5, first [...] cisely sighting the antenna a[...] areas of the globe. In this way [...]ferent beams can use the same [...]cy.

What is more, each signal is [...] in one of two ways, so the nu[...] channels available is likewise do[...]

The Intelsat 5 concept may b[...]tionary in comparison with the [...] forerunners but it is by no me[...] last word on the subject.

Already further improveme[...] planned to put existing frequen[...] better use. A successor to the [...] range is on the drawing-board.

But many on-board technical i[...]vements cannot be carried out [...] expanding and converting mo[...] 200 ground stations around the w[...] the introduction of new comsat t[...]logies will take time on their acco[...]

Deutsche Bundespost at prese[...] four dish antennas in Intelsat us[...] at Raisting in Bavaria and one, sp[...] devised for Intelsat 5, at Usingen i[...] Taunus hills, near Frankfurt.

Two more antennas are being [...] Raisting and a further two are sch[...] for commissioning in Usingen by [...]

Between them they should be en[...] to handle the expected increase in [...] phone communications throughout [...] 80s.

Wolfgang B[...]

(Frankfurter Rundschau, 29 Ma[...])

European space agency moves to silence critics

A new research satellite named after an Ancient Greek astronomer should go some way towards satisfying persistent critics of Esa, the European Space Agency.

Criticism has been rife ever since the agency was set up in May 1975. Scientists from several European countries complain that roughly 80 per cent of Esa funds are invested in two projects.

They are the Ariane launcher rocket, 47m long and 208 tonnes which was first launched successfully on Christmas Eve 1979, and Spacelab, the manned European space laboratory that is fast nearing completion.

Esa is funded by 11 European countries and last year its budget was about $700m. Too little cash is left to spend on scientific space research, critics claim.

The European Science Foundation, Strasbourg, recently put the case succinctly in its report on Space Science in Europe. European space research scientists, it noted, had to make do with a sixth of the sum at their US counterparts' disposal.

This, the report said, had proved seriously detrimental to European space research.

A further complaint is that Europe will have only limited access to the US space telescope with its 2.4m antenna, which is due to be put into orbit in 1984.

In keeping with Europe's financial stake in the project European astronomers will be entitled to only 15 per cent or so of the telescope's observation time.

It will be capable of observing objects 100 times weaker in light output than those visible to the best terrestrial telescopes. The report reckons Esa ought to launch at least one research satellite a year fitted out by European laboratories and to carry out more experiments on board Spacelab.

So European astronomers and astrophysicists will doubtless welcome the decision taken at the beginning of March to fund an astrometry satellite, Hipparcos.

Hipparch, 190BC-125BC, was an Ancient Greek astronomer who drafted the first astronomical chart.

The satellite is planned to measure the position and movements of 100,000 stars with an accuracy of one thousandth of an arc second.

This is equivalent to within a twentieth of a millimetre over a distance of 10km.

Hipparcos is to cost $185m, to be launched by Ariane in 1986 and to have an active life of two and a half years.

Research departments in Berlin, Bochum and Heidelberg and working partiesin Bonn, Hamburg and Munich are all keenly interested in the new satellite.

Professor Theodor Schmidt-Kaler of the University of the Ruhr, Bochum, points out that with its aid a new system of coordinates can be compiled in outer space.

The system will be available for use in estimating more accurately than hitherto possible the trajectories of satellites and space probes.

Yet not even Hipparcos will fully silence Esa critics, since Spacelab, which is scheduled to be launched by US Space Shuttle for the first time in April 1982, marks the beginning of an alarming development.

Spacelab is the second most expensive Esa project and will have cost an estimated DM1.5bn, as opposed to Ariane's DM2bn.

But it will not be utilised by Europe to the extent envisaged. A year or so ago five European flights by Spacelab were scheduled.

Bonn, incidentally, is paying the lion's share, about 60 per cent of the cost of the Spacelab project.

The first, a joint Nasa and Esa mission, was due to take place in June 1981. Esa flights were scheduled for August 1982 and mid-1983, the two German flights for the end of 1983.

But these projects have been more than halved because the price demanded by the United States per Space Shuttle launching is too high.

Even though European taxpay[...] supplying the Americans with acc[...] the space lab free of charge, as i[...] Nasa is only prepared to allow f[...] one free Space Shuttle launching.

Thereafter Esa is to be charged ro[...]ly DM100m per launching if Spa[...] missions are to be for European [...] only. But neither Esa nor Europe[...] dustry, interested though it may b[...] experiments on board Spacelab, ca[...]ford regularly to pay this price.

So the amended Spacelab plan [...]vides for the first joint flight to b[...] April 1982, always assuming deve[...]ment of the Space Shuttle is not fu[...] delayed.

Only one of the two German fl[...] originally planned has been retained [...] is now due to be held in Dece[...] 1983.

During other Spacelab missions [...] for by the United States Esa is now [...] to rent small payloads for Europea[...] periments.

On flight No. 4 in April 1983 [...] periments with reduced gravity are p[...]ned. On US flight No. 8 in mid-[...] experiments in terrestrial exploratio[...] envisaged.

Esa is to participate in solar rese[...] experiments on flight No. 10 or 11 [...] each of these three cases Esa will [...] only to pay about 15 per cent of the [...]load bill.

This cuts the cost by roughly half [...] 115 million units of account, or ab[...] DM280m, originally earmarked for [...] two European Spacelab flights.

Anatol Johan[...]

(Frankfurter Allgemeine Ze[...] für Deutschland, 26 March 1[...])

■ ENERGY

Scientists put the case for hydrogen generated from solar power

Hydrogen generated by solar power is the only really feasible energy resource that will be available even to Europe before long, claims Brunswick physicist Eduard Justi.

He and US electrochemist John Bockris have perfected their concept over the past 25 years and published their findings in *Wasserstoff — die Energie für die Zukunft* (Hydrogen — the Energy for the Future).

The publishers are Udo Pfriemer Verlag.

Ten years ago energy experts still sounded optimistic about coal, oil and natural gas reserves. Supplies seem assured for several hundred, if not 1,000 years.

Coal reserves in the United States were said to be likely to last over 4,000 years. But forecasts have since been revised substantially.

The lights could go out some time next century unless conventional energy sources are not replaced by newcomers, they now say.

Views differ as to when this will happen, but only inasmuch as some pundits reckon it will be in the next 50 years, whereas others claim the day of reckoning may be delayed for 100 years.

So far governments have banked on nuclear power. It was to supply the energy hitherto provided by coal, oil and natural gas.

But uranium for light-water reactor fuel rods will run out sooner or later too, leaving as the only options breeder reactors or nuclear fusion, which is still in its early days.

The energy both are likely to be able to supply should prove very expensive. Besides, there are the safety risks of nuclear reactors and the unsolved problems of storing or otherwise disposing of radioactive waste.

So in the long run, say Professors Justi and Bockris, there is only one energy source that is environmentally beyond reproach and will be available in unlimited quantity: hydrogen.

They started experimenting with hydrogen generation in the mid-50s and reckon it should prove possible in the foreseeable future to generate by electrolysis power from solar power stations sufficient to fully replace conventional fuels such as coal oil, natural gas and nuclear reactor rods.

In about 25 years technical developments could be so advanced that a solar hydrogen power system is feasible within 50 years or so.

Hydrogen has a number of advantages over other fuels. It is easily transportable, versatile in use, can be stored in large quantities and is more efficient.

Since pure water is generated as a by-product of hydrogen combustion the greenhouse effect, or overheating of the earth's atmosphere such as happens when coal, natural gas or oil are burned, need not be feared.

The two professors envisage hydrogen generation in large-scale solar power stations in the Mediterranean countries, since they alone have sufficient solar energy for the purpose.

The mean solar radiation density, or sunshine, is only 116 watts per square metre in West Germany, whereas the Mediterranean countries reach 175 watts or so and North Africa as much as 200 watts.

Solar power stations are so advanced that smaller units ranging from 0.5 to 60 megawatts are already operational and research is concentrated on the construction of so-called solar farms.

Solar farms are envisaged as a series of cylindrical collectors in dish shape that will automatically follow the path of the sun, absorb its rays and reflect them on to an absorber tube mirror-coated on one side.

In the tube water will be heated to between 150 and 300 degrees centigrade and converted into steam via a pressure storage unit.

The steam is to be converted into electric power for electrolysis mechanically, via a generator. Solar farms will have an installed capacity of between 100 and 200 megawatts.

Experiments are already under way with large-scale power stations dubbed solar tower units where mirrors known as heliostats will amplify radiation 400- to 800-fold.

This enhanced radiation will be aimed at an absorber tower 50m to 200m tall in which water can be heated to 600 degrees or helium to 800 degrees centigrade.

Electric power will then be generated via steam or gas generators, as on solar farms.

Hydrogen generated by electrolysis, or the decomposition of water by means of electricity, can be piped straight to the consumer without loss and with a minimum of energy consumption.

Over larger distances, say more than 400km, this could prove cheaper than relaying electric power, a substantial amount of which is lost in transport.

A further advantage of hydrogen is that steel pipes laid underground take up less space than electricity pylons with their safety zones.

Hydrogen piped from the Mediterranean to Central Europe can either be fed straight to municipal gas grids or to power stations and other large-scale consumers.

Contrary to widespread fears this new form of energy should prove fairly safe. A hydrogen pipeline has run uneventfully between Chemische Werke Hüls in Marl, Westphalia, and the Cologne area for the past 40 years.

Besides, or so Professors Justi and Bockris claim, it is much less explosive than, say, town gas, since it does not react until a rich mixture with oxygen is reached.

In an age of spiralling energy prices hydrogen should have a further advantage. It is cheaper to manufacture than conventional energy, including power from light-water reactors, as charts show.

Reactors reach 30-per-cent efficiency at best, whereas conversion of steam heated to about 540 degrees centigrade at a large-scale solar power station should achieve 40-per-cent efficiency.

Much of the power may be lost in electrolysis, leaving a 12-per-cent degree of efficiency, or 12 megawatts from 100 megawatts of sunshine.

But the two basic ingredients, sunlight and water, are available free of charge, whereas nuclear fuel is costly.

Hydrogen fuel will revolutionise not only road transport but also aviation and aircraft manufacture. It is more efficient, so aircraft will need less tank capacity.

Take-off weight can thus be reduced and aircraft range substantially increased. Hydrogen could mark the start of a new era for jumbos and SSTs, which are limited by tank capacity in their non-stop flights.

Private cars can be converted from petrol to hydrogen fuel with little difficulty. Conventional engines can be retained; only changes to the ignition are required.

Fuel supplies are reportedly problematic, since cars would either have to carry a liquid hydrogen tank or use lightweight steel cylinders of compressed hydrogen.

According to estimates made by the two professors the cost of hydrogen fuel should be roughly equivalent to the price of conventional fuel in 1974.

Intensive effort is being devoted to solar hydrogen energy in the United States, whereas Europe has so far shown scant interest in the new idea.

In the Old World planners still bank on nuclear power and politicians are evidently happy to turn a deaf ear to the advantages of the new technique.

Sad to say, they and not scientists will take the decisions. Will power one day be generated from sunlight and hydrogen or will we have to pay the higher price of nuclear power?

Professors Justi and Bockris not only supply a solution to the energy problem, they also take into account environmental desiderata, availability and price.

Their proposals should surely make politicians and the public sit up and think.

Dietmar W. Ansorge

(Hannoversche Allgemeine, 26 March 1980)

Ministry cash for homes experiment

Energy saving techniques for detached and semi-detached homes are currently under investigation in Landstuhl, a town of 10,000 people near Kaiserslautern.

The project is underwritten by the Bonn Ministry of Research and Technology and supervised by the Fraunhofer Association's Institute of Systems Engineering and Innovation Research.

The municipality has proved eager to back the experiment and placed a suitable choice residential location at its disposal.

Builders are to be relieved of what, for the time being, is a heavy burden of additional construction investment. The idea is to study over a period of several years construction and running costs and suitability of various techniques.

It should then be clear whether builders will ever be able to afford the latest energy-saving techniques without subsidies and what value they really are.

First and foremost, of course, is domestic heating by solar energy. Sunshine in Central Europe cannot, of course, be increased but known facts of physics can be harnessed and mistakes of the recent past be corrected in construction.

In the motor industry manufacturers have been able to offset spiralling wage and material rather than pulling it.

Material was put to better use and assembly costs were cut. But the cost of repairs increased, since there were substantially fewer individual parts that could be replaced.

There has been a similar trend in the building trade. Walls are built thinner (as thin as at all feasible) and larger (in sections conveniently assembled or entire storey units).

Repair and heating costs have increased as a result. Prefabricated units may, by using a 5cm layer of insulating material, achieve the insulation capacity of a 50cm brick wall, but storage capacity does not compare.

Walls are now to be built more solidly and better insulated. Double glazing is envisaged and geothermal heat is to be harnessed by installing heat pumps, which work along opposite lines to the refrigerator.

Heating costs can be halved by building walls thick enough and installing additional insulation. This will include double glazing and extra inside windows six inches behind the double glazing.

This technique is nothing new; there are places where it is regulation. Up to 80 per cent of heating costs could be saved, but the expense would be out of all proportion to the saving.

So the remaining 50 per cent will have to come from somewhere, hence experiments with heat pumps, solar collectors and solar cells.

Large areas of low-temperature floor heating are a must if these techniques are to be put to economic use. Besides, rooms heated in this way do not send clouds of dust whirling. They also combine warm feet and a cool head.

This the Ancient Romans well realised, only they installed floor heating powered by smoke gas.

Heat pumps can be used to extract up to about three degrees centigrade from the surrounding soil, ground water and air for use in heating the home and its tapwater.

But in high density estates they would freeze the soil and ground water.

In Landshut greatest store is set by solar collectors, although in Germany they will always have to be accompanied by an additional heating system.

What this means in practice is that a conventional heating system, preferably installed as a floor heating, could have its running costs cut by solar engineering.

Architectural design will be strongly influenced by the need to harness solar energy for central and water heating.

Planning must aim at locating homes in the sun and out of the shade as far as possible. Sun roofs will not make homes look any the more attractive.

Already residents have launched pressure groups to protest against what they claim will be eyesores.

Solar cells would be the most effective. They work like a exposure meter or the power antennas put out by satellites, but as yet they are far too expensive to be used in housing.

Only a few years ago each kilowatt generated by silicium cells cost several thousand dollars. Now the cost has been

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■ ARCHAEOLOGY

University puts mummies to ultimate test

Tübingen University scientists believe they are the first to examine Egyptian mummies with the most modern technological equipment.

The tests were made on one of the largest collections of mummies in the world, a collection which was "discovered" in the cellars of the university after 65 years.

The results of the tests have been decribed as sensational.

The 200 mummies — heads, torsos and some complete bodies — are up to 4,000 years old and mostly in such a good condition "that they seem to be alive and one might almost think one knew them" according to Professor Horst Ritter, director of the anthropological department.

Up to three years ago the mummies were stored and ignored in a corner of the department. The story of the mummies goes back to the beginning of the century, not counting the several thousand years they spent under the sand of the Egyptian desert.

At the beginning of the century, an assistant from the Tübingen anatomical department was examining skeletons from the prehistoric burial ground of Abusir El-Meleq on the Nile. When he returned to Germany he wrote a large volume on the subject, still a standard work on Egyptian anthropology.

An anonymous individual was so taken with this work that in 1915 he sent its author, Müller, several boxes containing the mummies and parts of mummies. What the sender could not know was that at the time Müller had left the University of Tübingen.

No one knew what to do with the boxes, so they were put away in a storeroom.

The boxes were rediscovered in the early 1950s, when reconstruction work was being done in the department. The anatomists had little use for the mummies, so they presented them to the anthropological department, which gratefully accepted them and entered them in its collection catalogue as "Egyptian skulls."



Once more they were stored in an obscure corner and forgotten.

It was not until three years ago that the department's scientists started giving the mummies — to which including members of the Pharaoh's families, governors and noblemen — the attention their past social status and intrinsic archaeological interest entitled them.

Although the 65 years they had spent in cellars were as nothing compared with the age of the mummies, it was basically an incredible piece of luck for the university that the mummies — mainly male bodies and heads — had been so completely forgotten. Otherwise they would almost certainly now be in the possession of a museum.

And this would have been a shame, not only on account of the gilded fingernails of many mummies and the "travelling money" they had in their mouths to take into the realm of the dead. Today scientists have far more facilities and technology for examining mummies, and can come up with sensational results.

Tübingen has a so-called computer tomograph. On non-technical language, this is a kind of super x-ray machine. Ordinary x-ray machines only produce shadowy pictures of the skeleton or often just white surfaces because the mummies were often stuffed with bitumen. The computer tomograph, on the other hand, enables precise analysis of tissue and the nature of tissue.

Tübingen scientists believe that they were the first ever to use the computer tomographs to study mummies — and the first results were sensational.

Take for example the head of a young man, mummy no. 1578. The computer tomograph not only revealed that he was suffering from mycosis — a disease previously believed not to have existed in the Mediterranean area.

More important was that these micro

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The mummified body of a woman who died about the age of 30 lies before an X-ray of her skull taken at Tübingen University. (Photo: dpa)

Concert marks saving of Nubian temples

One of mankind's cultural heritages has been saved — the Nubian temples in upper Egypt.

To mark the fact, representatives of 40 countries with their Egyptian hosts gathered in Aswan to celebrate on 20 years after Unesco launched an appeal to save the temples, which were threatened from the Aswan dam project.

The 2,000-year-old columns of Philae temple have been resited on the island of Agilkia, not far from the old site.

And it was on the island that the celebrations were held.

After a concert featuring music by Mozart and Beethoven, the foundation stone for a national Nubian museum was laid at Aswan. The museum will show how advanced was the Nubian culture 3,000 years ago.

The Secretary-General of Unesco, Amadou Moktar M'Bow, of Senegal, symbolically entrusted the saved temples to the wife of President Sadat.

On this occasion, the Egyptian Government was represented in force, in contrast to 20 years ago.

Then, official circles were unenthusiastic. President Nasser is alleged to have said of the Unesco campaign: "Pack the stuff and take it with you."

The temples were dismantled into 35,000 pieces, taken to safe places and rebuilt, in contrast to previous practice when monuments of ancient Egyptian history generally tended to be sent to European and American museums.

One of the first temples to be resited and reconstructed was that of Debod. The resiting was financed and carried out by the Federal Republic of Germany. The temple now stands on an island within sight of the Aswan dam. The temple is the second most famous after the rock temple of Abu Simbel. German archaeologists also played a major part in the resiting of this temple.

During the celebrations, specific mention was made of the pioneering contribution made by West German archaeologists.

When Kalabscha was resited, the response was far from overwhelming. The rescue had not captures the imagination or interest of the world. Now, 20 years after the rescue started, tribute was paid to the campaign not only as a monumental work by the whole of mankind but as an example of how a new consciousness has emerged among nations.

A country's cultural heritage is no longer regarded as something secondary to industrial development. The discovery and conservation of the past is seen as a contribution to the establishment of a country's own identity.

The way would now be clear for intensive development of tourism in the area, the building of hotels, if it were not for the problem of the resettling population. The temples are safe.

But the people who lived in the towns and villages now covered for ever by the dam have not adjusted as well to the move as the lifeless slabs of stone.

The temples have been resited so that the layman could hardly tell that these are not the original sites.

Talking to the people, one continually hears that they want to go back, where they came from. They want at least, to live near the dam. They have electricity in their homes now, but that is no substitute.

Hannelore Gerwald

(Lübecker Nachrichten, 14 March 1980)

Nile delta dig seeks a link with Ramses

German archaeologists are excavating a 3000-year-old town in the Nile delta where they believe that Pharaoh Ramses II once kept Israelite prisoners.

Dr Arne Eggebrecht, leader of the six-man team of archaeologists and head of the Pelizäus Museum in Hildesheim, says there is a possibility that there could be a connection between this town and the Israelites.

The aim of the expedition, Eggebrecht says, is to prove that this is in fact the capital city of Ramses II mentioned in the Bible, and to track down all the evidence indicating a connection with the Hebrew tribes.

As long ago as the 1930s, columns, clay shards and piles of stones were found in on the site, the town of Kantir near Tell el Dabaa. On these stones they found the name of Ramses II and that of a soldier called Musa (Moses). These were clues to this being the city of Ramses II.

The German archaeologists, working together with the Austrian Archaeological Institute in Cairo, intend to dig for two months at first. If the results are promising, further excavations will be planned, says Eggebrecht.

Ramses II, one of the most powerful Pharaohs, ruled Egypt for nearly six decades from 1290 B.C. He is the first king known to have signed a peace treaty — in hieroglyphus and cuneic script — with the Hittites in 1259 B.C.

The town bearing his name is mentioned in the book of Exodus in the Old Testament. The town was built by the Egyptian near the territory of the Hysci, the mysterious race whose warriors conquered Egypt about 1650 B.C. and were not driven out until about a century later.

Ramses probably built his capital here to demonstrate to his rivals in the Middle East that Egypt was the most powerful country in the region.

According to Austrian archaeologist Dr Manfred Bietak, it is assumed today that the Hysci were Semites from the lands of Canaan, (modern Syria, Lebanon and Israel). Bietak himself is excavating the Hysclan capital of Auaris near Tell el Dabaa.

The ruins of the two cities cover almost five square kilometres. It is assumed that the rest of the Ramses palace is now under farmland.

Dr Bietak says: "Time is against us. In ten years these ancient monuments will probably be lost to us for ever. In cooperation with the Germans, we hope to learn as much as possible in the next few years."

The sites are threatened by urban expansion and the use of modern machines in agriculture.

(Nordwest Zeitung, 12 March 1980)

■ THE ARTS

Artist-turned-writer compares the means of expression

Playwright Peter Weiss was a painter for 25 years before he turned to full-time writing and won world fame with his plays on Marat, Auschwitz and Vietnam.

Weiss, son of a Jewish textile manufacturer, produced paintings expressing the terrors of dictatorship and the loneliness of exile from 1933 until the 1950s — works which are oppressive visions of fear and despair.

Two years before the German invasion of Poland he produced the nightmare apocalyptic work *The Great World Theatre*, in the manner of Breughel and Hieronymus Boschl in 1940 he painted a work in which he represents himself as a hawker at a fair where the merriment is somewhat sinister: a stranger in a world which is out of joint.

Four years ago an exhibition of Weiss's paintings and drawings was shown in West Germany and the GDR and the general public first became acquainted with Weiss's artistic work.

This exhibition is now being shown again at Bochum Museum until the end of April. Apart from paintings, drawings and water-colours, it contains illustrated manuscripts, collages and experimental films.

Weiss, who now lives in Sweden, attended the opening of the exhibition, where we spoke to him.

Q: Mr Weiss, one of the aims of the exhibition is to combat the view of you as an author who also paints. But is it possible to draw a clear dividing line between Peter Weiss the author and Peter Weiss the artist?

A: Of course you cannot completely split anyone in two. Of course there are close interconnections between the painter and the writer but the fact remains that I have worked in two completely different media. For many years I was more interested in the medium of painting, then I gradually felt a greater need to express myself through the medium of writing. But for 20 years I was nothing but a painter and described myself as such.

Q: Your paintings clearly contain a great deal of personal experience. What do your pictures mean to you today? Has your painted autobiography changed into a document of contemporary history?

A: It is difficult to say. Since the end of the 1950s I have painted very little. My work in the visual arts ended with films and collages, and since 1960 I have only worked as a writer. It is clear that 20 years afterwards I see a lot of my painting in retrospect because I am no longer dealing with this kind of pictorial material. But it shows me very clearly a very personal world, a world in which I lived and acted, as a painter.

Q: How was it that you started as a visual artist? Why this roundabout route towards becoming a writer?

A: I don't think it can be called a round-about route because even as a child I believed that I would have to be a painter and the first things I did were drawings, pictures drawn from my own life and my own experience.

And during the emigration, exile and the war my only thought was to continue painting. At the same time I wrote constantly. The paintings, pictures, drawings were accompanied by poems, drafts for plays. But many painters have done this, there is nothing unusual about it. Writing only began to take the upper hand later, but not at the time of the works shown here in this exibition.

Q: How would you define the difference between the two, writing and painting? What are their weaknesses and strengths, in your opinion?

A: What connects them is the visual aspect. The visual plays a great part, even in what I write. I always want to be able to see very clearly before me the milieu in which people live, their circumstances, contemporary events.

Images have always greatly influenced what I painted, just as now, they greatly influence my writing. The only question then is how far does one medium go, to what extent does one believe it is now necessary to work in another medium.

It is not as if I am a musician who has played one instrument for many years and then decides to play a different one. For me the question was that of the mode of expression. Painting is something static, it always presents a closed world, a closed event, whereas writing enables one to move on continually from one event to another. The world has become more open, it has become more restless, and these of course are the results of the experience of the years of exile and war.

Q: Could there be a connection between your move away from painting and your political convictions? Are paintings limited in their ability to bring about and even change things?

A: I don't know. There are paintings which have had a tremendous political effect, for example Goya's *The Shooting of the Rebels* and Picasso's *Guernica* — both are political agitation. Basically, painting has the same potential as literature. It is just that a picture can only show one situation, whereas my own view of the world was increasingly becoming so many-sided that painting was no longer enough.

Q: In your plays you depict important world historical events, for example Marat and the French revolution, Auschwitz, Vietnam. In your book *The Aesthetic of Resistance*, you give detailed interpretations of such monumental works as the *Pergamon Altar* and Picasso's *Guernica*. Is painting no longer in a position to deal with themes of such importance?

A: I believe that painting can do this, and it has proved it often enough. What one wants to say, what one wants to express, is a question of personal character. When I, coming from the milieu of the early thirties, began to paint the world was still intact, though disaster was very near.

And this disaster can be seen in my very early pictures. These paintings of 34/35 already anticipate the war, exile. But that was unconscious. These were intuitive reactions to a world which I regarded as threatening.

Then came the catastrophe of fascism and the catastrophe of war and the world lost any trace of intactness. Then, in the 40s, there was a search for new forms in painting — the closed realistic world, the rather dreamily magic realistic world dissolved.

Then came experiments, influenced of course by events in the world. The world was utterly unsure of itself. I was in a state of constant restlessness.

Q: How would you work today if you were a painter again? Could you take up again where you left off then?

A: I would never do abstract painting; I would always be a realist because I am a realist in my writing. I would describe the world as I see it and as I would like it to be. It will always be a world which is recognisable, by other people too. But unfortunately life is too short for me to consider ever taking up painting again. It would have to be a completely new start.

It would take many years and there is so much to write that at the moment I simply do not have the time to risk such an adventure.

Wolf Schön

(Rheinischer Merkur / Christ und Welt, 14 March 1980)

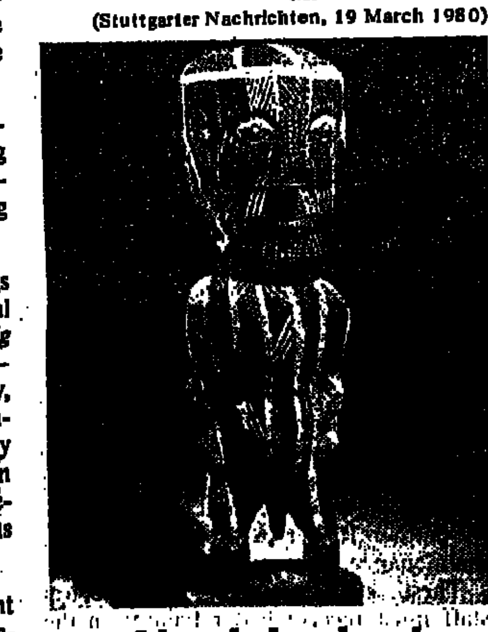
Continued from page 10

organisms had caused a tumour in his head. This must have led to pressure on the brain, and this is why the young Egyptian had brain surgery. Not only that — the computer tomograph showed clearly that he survived the operation.

In another male head they discovered an iron arrowhead which had obviously been shot into his mouth and stuck in the back of his head. Even more interesting is that the arrowhead is an archeological rarity, probably from Asia Minor.

Michael Diestel

(Stuttgarter Nachrichten, 19 March 1980)



Aboriginal art

This carved wooden figurine from Australia is on show in Stuttgart as part of an Aboriginal art exhibition. The exhibits are on loan from the Aboriginal Art Board of the Australian Council. The exhibition is to also appear in Bonn and Bremen. (Photo: Catalogue)

■ MEDICINE

Use of advanced apparatus leads to 'progress and risks of error'

The increasing use of sophisticated medical apparatus has increased the risks of accidents because of defects in the equipment or human error.

But, a congress in Hanover has been told, the sensible use of technical possibilities had led to enormous progress in many fields, especially intensive care and heart surgery.

The congress, which dealt with medical apparatus in hospitals, was organised by Professors O. Anna und C. Hartung of the Hanover Medical School.

It examined ways and means of tracking down the causes of accidents and how to avoid equipment failures.

The conference heard that the "inexorable development" of medical technology has provided doctors with many therapeutic and diagnostic aids which are taken for granted today.

The "soulless apparatus medicine" has come under severe criticism — a criticism which might be justified where technology is an end in itself.

The fact that the congress delved deeply into the accident risks attaching to such equipment does not mean that accidents are the order of the day.

But no matter how rare such accidents may be they are considered particularly grave in an institution whose sole aim it is to cure and alleviate pain rather than cause it.

Said one delegate: "Every fatality resulting from the use of technological medical equipment is one fatality too many."

There are many ways in which such apparatus can endanger a patient: if he is directly connected to an electrically operated appliance, electric shock is always a possibility. This can be due either to defects or to wrong handling of the equipment.

Another example is accidents in the course of the administration of an anaesthetic. The danger from faulty apparatus is very real there, as for instance when a monitor fails to register a dangerous condition in a patient or when a doctor, due to misregistering on the part of the monitor, makes a wrong diagnosis and hence prescribes the wrong therapy.

There are no exact statistics on such technical accidents. But a few years ago Professor H. von der Mosel released a study on the various causes of these mishaps.

Having analysed more than 1,400 accidents in the United States, he concluded that only 2 per cent were caused by unforeseen circumstances. In other words, they were genuine accidents.

Eight per cent were due to faulty design and 16 per cent to an inadequate or wrong electricity supply or other installation shortcomings.

Most accidents (64 per cent) were due to human error — inappropriate use of equipment, ignorance and carelessnes.

Another 16 per cent were due to poor maintenance.

These statistics show that medical staff must receive better training in the handling of sophisticated equipment.

Doctors and nurses must be familiarised with the dangers if they are to avoid them. It is not enough to know which button to push and when. Instead, they should also understand how the machine functions in order to be able to cope with emergencies.



Proper training can also make handling such apparatus routine rather than an annoying chore.

Professor Anna suggested the introduction of a licence for certain types of apparatus. This licence would have a limited validity and would have to be renewed every two years.

He also called for practice sessions with simulated mechanical failures to teach medical staff how to cope.

If for no other reason, better training is urgently needed because many doctors (except anaesthetists and intensive care specialists) are not fully familiar with the technical design of such apparatus on leaving university and because staff turnover in intensive care units is usually high. Courses of this nature for radiation equipment have been mandatory for some time.

A Swiss delegate complained about the manner in which the various groups of equipment are arranged and that they are frequently inaccessible. He said that those who installed the machinery frequently paid no attention to the requirements of those who have to use it.

He suggested that aircraft cockpits be used as an example in installing technical equipment. There, every button and lever is within easy reach of the crew and all guages can be read readily.

In many intensive care units, on the other hand, the instruments are arranged helter-skelter, making it very difficult for the doctor to handle them.

Instructions for the use of the machinery are another sore point. Germany's new Appliance Safety Act stipulates that all instructions and markings (like "off", "on", etc.) must be in German.

But all this is of little use when the instructions are so complicated that the person handling a piece of equipment must know how it functions in every detail before he can understand them.

Moreover, many a "book of words" cannot be found when it is needed.

Aviation was cited as an example in another connection as well. Some delegates called for a checklist to be gone through before a machine is used. This has already been introduced in some hospital but many still lag behind.

The German Society of Anaesthetists has now also called for a checklist.

Since the safety of apparatus depends first of all on its proper functioning, hospitals should have highly trained maintenance and repair staff.

This is another complaint. Very few hospitals, for instance, employ a bioengineer; and when they do he is frequently rejected by the medical staff. It seems that many hospitals have not yet realised how important it is to have a skilled maintenance staff.

There are also many communications difficulties between technicians and doctors. The bioengineer should not only ensure the proper functioning and use of equipment but should also act as an adviser when buying new items. And, finally, he should train other staff.

Eleven hospitals are now carrying out a pilot experiment with socalled technical service centres.

The experiment is financed by the Bonn Research Ministry to the tune of DM28m. Its purpose is to improve the safety of the equipment and to examine the effects of such technical [illegible] group on the efficiency of hospitals.

The Herdekke Community Hospital has had very good experience with "medical checkups" for equipment. This also includes ensuring that the various items are properly tuned. According to the medical director of the hospital, mishaps due to wrong settings have diminished dramatically.

This is probably also due to the fact that mistakes of this nature are thoroughly discussed with the staff which receives intensive instruction in groups.

Though the design of most equipment is safe due to strict regulations, the Association of German Electrical Technicians and other organisations' work on improving safety standards continues. A step in the right direction is the Appliance Safety Act which has been in force since the beginning of the year.

Still, many experts hold that the Act is inadequate.

Professor H. Hutten of Mainz told the congress that a commission of experts recommended in 1978 that medical apparatus be classified in five categories, depending on the degree of danger to the patient. The commission called for mandatory maintenance for certain items and compulsory additional training for the staff.

But the recommendations have not been made part of the new Act. Instead it contains vague regulations that lag behind those called for by the commission.

Moreover, the actual implementation rules for the Act are unlikely to be forthcoming for some time.

Said one delegate: "Our equipment has been so improved that it is already better than the Act."

Hans Zet[illegible]

(Frankfurter Allgemeine Zeitung für Deutschland, 26 March 1980)

Music wins wider acceptance as a therapeutic aid

The therapeutic value of music is becoming more widely recognised. Hamburg University has introduced a chair for the subject, the first in Germany.

And at the Herdecke Hospital, London, music therapist Mary Priestly is teaching music therapy in two-year courses. An article she published in *Musiktherapeutische Umschau* (Music Therapy Review) lists some of the more startling cases:

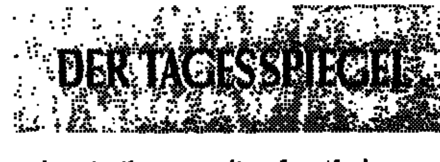
A young mother who suddenly developed a rejection for and belligerence towards her second daughter was cured through this form of therapy. She came to understand that her rejection was actually directed at her sister whom she had found in bed with her husband.

A man who had been paralysed on one side and was jobless for 15 years was able to begin a new working life after 88 music therapy sessions.

A young woman was relieved of her frigidity after 16 sessions.

Other European countries such as Britain, Holland, Austria and France are far ahead of Germany in research into and teaching music therapy.

Even an official report on psychiatry in the Federal Republic of Germany



points to the necessity of exploring new ways in psychiatry, names music therapy as one of the most important.

A Heidelberg study purports to have evidence that music therapy could successfully be used in a number of instances, among them psychosis, organic brain malfunction, neuroses, sexual aberrations, alcoholism, drug addiction, psychosomatic ailments, learning difficulties and pathological eating habits.

Based on this and other studies, the Baden-Württemberg Research Ministry (in cooperation with a rehabilitation organisation and the Hamburg Music and Fine Arts Academy) has taken steps to introduce special courses on music therapy at Heidelberg University.

Entry qualifications are: a secondary school leaving certificate and an entrance examination.

Disabled applicants will be considered in certain circumstances.

Würzburg University has had optional courses for students of medicine and psychology since 1976.

One problem of music therapy is the gaining of scientific recognition. Medical doctors usually ask "What music does what?"

But since medicine can determine the effects of music on the functions of the heart, the circulation, the respiratory system, metabolism, etc. this should soon be solved.

By monitoring muscle reaction, the Viennese doctor and music therapist Professor Gerhart Harrer has managed to prove that muscle activity increases while listening to music. This is unrelated to physical movement and the patient is unaware of it.

There are vast differences between the muscles of the head and those of the arms and legs. Dancing music and marches have a much greater effect on the leg muscles than on those of, say, the forehead. Other types of music affect the muscles in an entirely different way.

Says one music therapist: "Music therapy is essentially the use of music — music ranging from a simple acoustic signal all the way to a highly developed art form — as a tool in treating the ill.

"It enables the patient better to understand himself and his environment, to move in it more freely and develop more psychological and physical stability and flexibility."

Heinz Ockhardt

(Der Tagesspiegel, 23 March 1980)

■ EDUCATION

School pupils organise community television project

Pupils at a comprehensive school near Mainz run a community TV station, AKK TV, that caters for an audience of 30,000.

AKK stands for Amöneburg, Kostheim and Kastel, a trio of local authorities in Hesse, midway between Mainz and Wiesbaden.

About 25 boys and girls at the Wilhelm Leuschner Schule have been associated with the TV project for nearly two years.

Take Susanne, a tall, slim girl aged 17. Her favourite subjects at school are biology, German and art. She dislikes maths. On AKK TV she is a programme presenter.

The programmes she presents are specially designed for the communities the school serves and could be seen by a maximum of 30,000 people, but in practice audiences are much smaller.

There is no shortage of enthusiasm on the part of the kids. They produce and direct, present and perform, write and research, man cameras and edit footage.

But they lack a transmitter. Undismayed, they have worked out a well publicised system of screening evening shows by video cassette at selected bars and restaurants.

The idea excites communications experts and landlords alike, since bars are usually full to overflowing on TV nights. So community TV really gets to the people.

The production team do it all by themselves. They come from the three towns, devise material about them, show their programmes in them and discuss the result on the spot with local people.

The community TV project is bankrolled by a Federal and state government 'art at school' promotion scheme, a countrywide project in which, at selected schools, artists (mainly actors) give lessons in their professional know-how and career techniques.

Hesse has chosen to spread the art net as wide as possible to include the media, with the result that freelance journalist Rolf van Lessen, 35, was hired to run the community TV project.

He is married with a small boy and is anything but a strict disciplinarian. He read journalism and dramatic art at university and the atmosphere in the studio at the Wilhelm Leuschner Schule is relaxed.

His production staff are as keen as mustard. School routine is necessarily boring, whereas running a TV station is the real thing, and they must prove every day they can deliver the goods.

It hardly needs saying that community TV exercises more attraction than a maths lesson. But the project stands or falls with the quality of the project adviser, in this case Rolf van Lessen.

He must ensure both continuity and quality, otherwise the reputation AKK TV deservedly enjoys in Amöneburg, Kostheim and Kastel would fall.

So far there have been no complaints, and no attempts to exert pressure of any kind either. Politicians and local authorities have learnt to take their community TV seriously.

Its only drawback is that programmes are too infrequent. The aim is to produce four one-hour magazine programmes a year, but the group have yet to keep to this schedule, although they hope to make it this year.

Staff certainly seem well-organised. There are three camera teams of about four men each. There is a link text desk, a planning department, a documentation division and a public relations unit.

The PR unit prints and distributes posters and programme notes and seems to have gained enough experience to be fairly sure of itself, as do the other sections.

The backroom boys and girls make a decidedly professional impression with their mixer unit and cutting desk.

Each one-hour programme takes several hundred man-hour to produce, and the project team devote spare time to it free of charge.

But community TV provides them with a wide range of opportunities. They learn how to work with others and how to subordinate themselves to the requirements of the task in hand.

The TV camera also gains them access to a variety of social and artistic spheres they would not normally frequent, and this and their coverage earn the respect of adults.

Mistakes have naturally been made, but AKK TV now seems firmly in command of the situation. Programme form and content, for instance, are geared to the circumstances in which programmes are screened.

The intro must be long enough to gain the viewer's attention, but between programme sections there must be a generous lacing of music so that glasses can be refilled at the bar.

What is more, statements by local politicians must be short and to the point. "I'm sure I don't know why," says Rolf van Lessen, "but after a politician's first sentence people start talking so loud you can no longer hear what he is saying."

Alfred Pointner

(Rheinischer Merkur / Christ und Welt, 28 March 1980)

Continued from page 9

cut to 600 dollars; the break-even point would be 150 dollars.

Solar heat is a scarce commodity in this part of the world but it is light all day. When technology reaches the appropriate stage of development we should be able to clad roofs and facades with silicium foil and use it to generate energy for heating, cooking and light.

Daylight light could then be stored in batteries for use at night. But that is still a distant prospect, both in Landstuhl and elsewhere.

Heinz Mostny

(Die Welt, 28 March 1980)

Children should 'see war crime trials'

Teachers should take their classes to trials of Nazi war criminals whenever the opportunity arises, says Lower Saxon Education Minister Werner Remmers.

Direct confrontation with the "fateful traces of the German past" was the most effective way of bringing home to schoolchildren today the Nazi era, he claimed.

Dr Remmers was addressing a meeting held at a Hanover school by the Christian-Jewish Cooperation Association.

This, he said, was the only way schoolchildren could "emerge from the ghetto of school-induced awareness of history and see for themselves that textbook knowledge, even though it was pruned for convenience, had something to do with the real world."

Direct confrontation was the only way in which pupils could draw their own conclusions to any satisfactory extent, he maintained in a lecture entitled Education against Extremism and Prejudice.

Was the any genuine prospect in the isolated, artificial world of learning, he asked, of lessons being learnt from the past when they were, for the most part, repressed by the more immediate environment?

There was a serious risk of the task of coming to terms with the past being fobbed off on schools. "That," he said, "would be too convenient a means of load-sharing."

The publication of suggestions for lessons about the *Reichskristallnacht* (the evening in 1938 when Jewish shops and institutions were finally and systematically smeared and smashed up in Nazi Germany) had he to careful, honest consideration of the Nazi regime in many schools.

This spate of activity was a result of the TV series Holocaust and in no way specifically ideological. Teachers and pupils had been equally enthusiastic about the idea.

Working parties had dealt with concentration camps in their own neighbourhood, interviewed eye-witnesses, evaluated material and thereby established a direct link with their local environment.

In view of this experience the Education Ministry had included Life under National Socialism as a compulsory subject to be dealt with in civics and environmental affairs lessons.

"As long as people are still alive who personally experience National Socialism and as long as personal documents are available, schools will continue to have an opportunity of drawing lessons on the basis of personal impressions of a direct and immediate nature," Dr Remmers said.

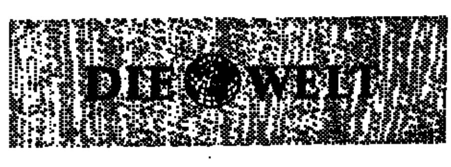
In a question and answer session after his lecture he said it would be desirable for teachers and classes to visit courts where proceedings were being held against alleged Nazi war criminals whenever the opportunity arose.

They could thus gain a personal impression of what life must have been like in the Third Reich. "But instruction to this effect cannot simply be given from above," he warned. "It must fit the curriculum."

(Hannoversche Allgemeine, 19 March 1980)

■ MODERN LIVING

Divergent points of view cloud parapsychology conference



Much to the embarrassment of Heinrich Scott, president of the Association for Research into Parapsychological Phenomena, delegates to the first PSI congress in Freiburg seemed decidedly gullible.

One lady said she had been in contact with UFOs that were due to address the United Nations on 30 March. Another said the other world was responsible for spooks of each and every kind.

The call from the floor was for spirits and things that go bump in the night. Facts were a minor consideration. Herr Scott had no easy time of it.

He implored journalistis to note that he felt UFOs were a load of rubbish. He is a computer specialist and was most anxious for parapsychology to be taken seriously.

Well he might, since the academic authorities who have made a name for the subject in the Black Forest university city not only stayed away from the congress; they were at pains to emphasise that they had nothing to do with it.

Professor Hans Bender, the highly-reputed head of the department of parapsychology and psychohygiene, said that for this one last time he was prepared to ignore the wider issues at stake.

He chose to do so because he felt sure many well-known authorities had accepted the invitation to address the congress because they had imagined his department must be sponsoring it.

Professor Johannes Mischo, his successor as head of Germany's only university department of parapsychology, was more forthright in his condemnation.

He said that parapsychology was still at the basic research stage and concentrating internationally on laboratory experiments for the most part.

"We are as much at a loss to account for psychokinesis as we once were to supply a scientific explanation for lightning," he insisted.

Walter von Lucadou, a physicist associated with Professor Mischo and his experiments, was even blunter. "The longer I concern myself with parapsychology, the less I believe in spirits," he said.

Scientists such as Bender and Mischo are worried that conferences of a less than strictly academic kind, such as the 22 March Freiburg gathering, would make already sceptical scientists even more convinced in their rejection of PSI and everything to do with it.

The first lecture seemed to bear out their misgivings. It was given by Kurt Schroffenegger, an Austrian lawyer and president of the Parapsychological Study Group in Feldkirch.

What he aimed at, he said, was to "build a bridge between the animistic and spiritistic tendencies in parapsychology." In reality he succeeded only in proving himself to be a dyed-in-the-wool spiritualist.

"Bodiless beings from the other world are the only explanation there can be for the inexplicable," he said. He was a Thorwald-Dethlefsen fan and reckoned reincarnation was a proven fact.

Divine justice proved the point, he claimed. "We are reborn many times, sometimes poor, sometimes rich, sometimes sick, sometimes healthy, sometimes masters, sometimes servants."

Professor Alex Schneider, a Swiss parapsychologist, admitted that reincarnation was not scientifically proven, but this prompted an uproar from the floor, which felt that a scientific view of everything was not strictly necessary.

"When someone reckons to recollect a previous existence it may be a kind of clairvoyance bridgeing time and place," says Professor Bender. "The individual sees in front of him an existence that need not necessarily be (or have been) his own."

Phenomena such as extra-sensory perception, telepathy, clairvoyance and precognition, or the faculty of prophecy, are nor felt to have been proven.

Professor Bender is likewise unconvinced that voices recorded on tape, another major issue at the congress, are really those of the dead. He suspects they are an instance of psychokinesis in which the memory of a familiar voice is given material expression.

Paola Giovetti from Italy convincingly demonstrated the incredible at the congress. Her subject was PSI painting, and she showed slides of works of art carried out by people whose hands suddenly began to paint as though they were moved by another person.

The case of Gustavo Adolfo Rol from Turin was, she said, unique. "This man is able to reproduce paintings in the manner of any painter (dead) without touching either paper or utensils."

The motif and the artist were decided by people present. "A sheet of paper is folded eight times and put to one side. Rol concentrates for eight minutes, then you may take a look: the painting is finished."

His own explanation of this phenomenon is that he is guided by an intelligent spirit. No-one has ever been able to prove him guilty of trickery or deception.

The view held by Professor Milan Ryzl, a Czech physicist, chemist and parapsychologist emigré to the United States, would appear to be no less fantastic.

He reckons to have proved that we leave messages on objects. Mental impregnation is what he has dubbed this phenomenon. Someone concentrates on an object in his mind's eye and leaves on it an intellectual trace that another sensitive person can identify.

Thoughts thus outlived the individual, Professor Ryzl said. He connected this with the belief in amulets as bringers of good luck.

Asked by the public how far parapsychological research had progressed in the East bloc, he said East bloc scientists were no further than their counterparts in the West. "But East bloc secret services have shown great interest in the idea."

Swiss teacher Theo Löcher told tales of seemingly self-propelled broomsticks, dancing blocks of wood and all manner of objects that fell down apparently by themselves.

Spirits might, he said, be responsible.

"Prejudice is, after all, a bad thing," was his conclusion from the ta[les he] had to tell from Swiss households.

Professor Bender is likewise in f[avour] of a "positive criticism of superst[ition]" but what he means is scientific re[search] into the occult.

The occult wave in recent ye[ars], a trend that has resurrected belief i[n wi]zardry and conjuring of spirits, is t[o the] detriment of parapsychology in his [opin]ion.

Psychohygiene, a kind of ment[al hy]giene, is an absolute necessity to c[ounte]ract the excesses of occultism, he [main]tains.

The occult wave is a sign of c[...] an age of anxiety about the futu[re in] which man is wondering more t[han he] usually does about the meaning [of] individual existence.

"Facts must be distinguished fr[om il]lusions," he says, always accepting [that] there are phenomena for which ou[r] senses are unable to provide a sat[isfac]tory explanation.

"But there is no sphere in whic[h so] many downright lies are told as i[n par]apsychology," Walter von Luc[adou] warns.

Martina Kem[...]

(Die Welt, 24 March [1980])

Woman police constables make breakthrough

Women police constables will soon be a common sight in Germany as they walk the beat with their male counterparts. Police in four Länder, or Federal states, have either already hired WPCs to start work on the beat, like male officers always have done, or are planning to do so.

Hamburg, for instance, has employed WPCs since the end of the war, whereas the authorities in Hesse and Lower Saxony reckon they still face difficulties before WPCs can be taken as a matter of course.

Small arms training and the use of firearms on the job are the main problems, says Egbert Möcklinghoff, Interior Minister of Lower Saxony.

He plans to appoint uniformed women police officers next year but is determined to be careful on this point. Everything must be done to ensure that female officers are given all p[ossible] protection.

Hamburg now has 166 WPCs [and] reckons wearing firearms (and u[sing] them if need be) is a matter of co[urse]. This is not regarded as a problem [in] Berlin either, where next September [for] the first time in 20 years WPCs [will] walk the beat again.

The first batch of Berlin WPCs a[re] former meter maids who did not [relish] the prospect of booking traffic off[enders] until they reached retirement age.

They are being put through a t[ough] sports routine, including judo trai[ning]. The only physical training they ar[e not] required to undergo is boxing and c[ertain] forms of outdoor activity.

WPCs will nonetheless be require[d to] do work primarily associated with [the] traditional roles assigned to wom[en]. Ministry officials in all four Lä[nder] agree that WPCs will mainly be c[on]cerned with "women's work" calling [for] the specialised knowledge of the fe[male] of the species.

This will actually entail searching [and] keeping an eye on women and chi[ldren] under arrest and handling children [and] old folk. WPCs might well also be [singled] out for maintaining contact with [the] general public, Herr Möcklinghoff s[aid].

He felt it was more in keeping [with] the nature and specific women's a[bility] to instinctively understand other peo[ple's] views and feelings for them to do [work] of this kind.

The employment of WPCs is m[...] frowned on in Länder run by Chris[tian] Democratic governments. In the Rh[ine]land-Palatinate or the Saar, for insta[nce], the idea is rejected on the ground t[hat] there are more than enough male ap[pli]cants to join the police force.

In Bavaria the authorities are reluct[ant] to state any reason why they are n[ot in] favour of employing women police o[ffi]cers. "Whatever we say is bound to [be] used against us," an official comment[ed].

dpa

(Frankfurter Allgemeine Ze[itung] für Deutschland, 21 March 19[80])

■ SPORT

Marathon runners put on a better display

West German runners fared extremely well in the traditional marathon on the outskirts of Paris, finishing in the leading group and improving substantially on previous performances.

Their success may have been due in part to the fast, seemingly insane initial pace set by the North Koreans and Ethiopians.

Views still differ on their gratifying showing, and much may depend on how the marathon specialists perform when they are back among themselves at the national championships in Waldkraiburg, Bavaria, on 15 May.

But Werner Dörrenbächer, a 25-year-old virtually unknown Saarbrücken policeman who first made a name for himself as a cross-country skier, certainly took up the challenge of chasing a leading group that had left him behind.

He finished runner-up to Chung Son Goe of North Korea (2 hours 10 min. 52 sec.) in 2 hours 12 min. 22 sec., a new German best over the distance.

Reinhard Leibold, 32, from Fürth, a marathon specialist as tough as they come, was fourth in 2 hours 13 min. 24 sec., while Ludwig Häfele from Bonn was sixth in 2 hours 15 min. 3 sec.

They too ran superb races against international competition. It is surprising that athletics officials decided on the Paris race as the first Olympic qualifying event.

At first glance indeed it might have seemed strange, although there could be no suspicions of competitors rigging the event to suit themselves in any way.

Basically, of course, it was because there are no traditional marathon events that attract international competition to the Federal Republic.

The long-distance running boom hailed in many Western countries, especially the United States, has so far led in Germany to no more than an increase in the number of more leisurely races for the public.

Organisers of these events are more interested in a large number of competitors than in the quality of entrants. Entry fees ensure reasonable financial backing.

The organisers would be happy if fine times were to be run but in no way insist. Marathon specialists have benefited only indirectly from this trend.

Pressure to perform well has so far come solely from outside, imposed by international trends. In recent years showings have improved by leaps and bounds.

In 1976, an Olympic year, 100 marathon runners ran their distance in 2 hours 17 min. 44 sec. or less. Last year the top 100 all covered the distance in 2 hours 15 min. 47 sec. or less.

Yet only one of the season's top 100 came from the Federal Republic of Germany. Does the Paris marathon and its sterling performances by three West German runners mark a turning-point?



Only a little more than 40 kilometres to go: these marathon runners bunched at the start have not yet even broken into a sweat. (Photo: Werek)

Legend has it that Pheldippides ran the 39km from Marathon to Athens to bring the good news of victory against the Persians in 490BC, only to drop down dead as soon as he had done so.

A great deal has happened since. Views differed at the start of this century as the exact distance he had covered, but they were resolved when, at the London Olympics in 1908, it was decided to pay respects to royalty.

On 24 July 1908 the marathon was run 26 miles 385 yards from Windsor Castle, where the competitors were seen off by their majesties King Edward VII and Queen Alexandra, to White City.

This, of course, is the exact modern Olympic distance of 42.195km on which agreement was increasingly reached during the 20s, especially after the Paris Olympics in 1924 and the Amsterdam Olympics in 1928.

The exact distance has continued to be discussed, of course, and when it happened not to be in dispute the shape of the course was debated.

For major international events a roundtrip course has gained acceptance, although marathons round recognisable circuits have also proved satisfactory.

One-way marathons of the point-to-point variety have gradually fallen into disrepute because they might be run in a tailwind.

Only the Boston Marathon has survived this particular allegation, but since its inception in 1897 the course has several times been revised and set at the 42.195km distance.

An important step forward performancewise was made in Port Chester, New York, in 1925 when Albert Michelsen of the United States ran the marathon in 2 hours 29 min. 1.8 sec.

He was the first runner to cover the distance in less than two and a half hours, and it took another 28 years for Britain's Jim Peters to 2 hours 20 min. in 1953.

Peters' time at Chiswick, London, was 2 hours 18 min. 40.2 sec., and it was a further 14 years before Derek Clayton of Australia beat 2 hours 10 min., passing the finishing post in 2 hours 9 min. 36.4 sec. in Fukuoka, Japan.

In the 20s and 30s stamina was considered the main criterion; lasting the distance was the thing.

Nowadays the marathon is raced against the clock, just as the 5,000m or 10,000m is. Lasting the distance is the lower threshold; performances that count must have much more to show for themselves.

Stefan Henry

(Frankfurter Allgemeine Zeitung, für Deutschland, 27 March 1980)

Afghan national soccer players seek asylum

Ten Afghan soccer players, including seven internationals, have sought asylum in West Germany "out of dissatisfaction with the Soviet occupation forces."

The first party arrived in Frankfurt at the end of January, the others at the end of March, team captain Mohammed Saber disclosed.

All 10 have applied for asylum and most are already getting benefits from the city of Frankfurt.

On the day Mr Saber made his statement to the Press all the Bonn Interior Ministry was able to confirm was that three Afghan football players had arrived in Frankfurt the week before.

The Frankfurt authorities are unable to say with any certainty that the refugees are in fact soccer players.

The 10 live at the moment in two hotels and are said by their captain to have crossed the border to Pakistan dressed in tribal clothing.

In Pakistan they first headed for Peshawar, capital of the North-West Frontier Province, then to Karachi, from where they flew to Frankfurt.

The seven capped players all came from Kabul. They have yet to make contact with a soccer club in Frankfurt.

"We prefer to wait and see first whether we are to be allowed to stay," explained Ebrahim Hashimir, one of them.

Afghanistan, with a population of 18m, has only about 300 soccer players, according to Mr Hashimir. "Yet last year we lost to the Soviet Union in Russia only 2-1," he said, with a note of pride in his voice.

dpa

(Hannoversche Allgemeine, 27 March 1980)